

Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

#### Test-I

| 1.      | What will be the output of following | 2.     | What will be    | the output?                 |
|---------|--------------------------------------|--------|-----------------|-----------------------------|
|         | program?                             |        |                 |                             |
|         | main()                               |        | main()          |                             |
|         | {                                    |        | {               |                             |
|         | int i=1;                             |        | int a[]={1,3    | 3,5,7};                     |
|         | for(;i<=32768;i++)                   |        | printf("%d      | ".&a[3]-&a[1]):             |
|         | printf("%d",i);                      |        | }               | ,[.][],,                    |
|         | }                                    |        | J               |                             |
|         |                                      |        | a 1             |                             |
|         | a 32767                              |        | a.1<br>h 7      |                             |
|         | b. Infinite loop                     |        | <b>D.Z</b>      |                             |
|         | c. 32768                             |        | C.3             |                             |
|         | d. None                              |        | 0.4             |                             |
| 3.      | What will be the output of following | 4.     | What will be    | the O/P?                    |
| 0.      | program?                             |        | main()          |                             |
|         | {                                    |        | {               |                             |
|         | int i=0;                             |        | struc           | t xvz {                     |
|         | switch(i)                            |        | 50,00           | int i                       |
|         | {                                    |        | J.              |                             |
|         | case 0:                              |        | J,<br>struc     | t vvz *n·                   |
|         | i++·                                 |        | struc           |                             |
|         | nrintf("%d " i):                     |        | struc           | ι χγ2 α,                    |
|         |                                      |        | h=øs            | 1,                          |
|         | rintf("%d "i)                        |        | p->i=           | ·10;<br>(//o/ -/// (* -) :) |
|         | printi( //d ,i),                     |        | print           | f("%d",(*p).I);             |
|         |                                      |        | }               |                             |
|         | printt( %d., ,i);                    | a ()   |                 |                             |
|         | }                                    | b.10   |                 |                             |
|         | }                                    | c.Garb | age Value       |                             |
| a.      | 110                                  | d.Com  | pile Time Error |                             |
| D.      | 011                                  |        |                 |                             |
| с.<br>А | 111<br>None                          |        |                 |                             |
| u.<br>5 | What is the storage required for the | 6      | What is the n   | part of compiler that keeps |
| 5.      | name "George"?                       | 0.     | track of name   | es and their attributes?    |
|         | a. Six Bits of Storage               |        |                 |                             |
|         | b. Six bytes of Storage              |        | a.              | Compile Table               |
|         | c. Six pixels of stirage             |        | b.              | Symbol Table                |
|         | d. Six Kilo Bytes                    |        | с.              | Table                       |
|         |                                      |        |                 |                             |

|  | d. Logical Table  |
|--|---|
| 7. Which of the following operators<br>cannot be overloaded in C++?  | 8. Which constructor is invalid for class cat?  |
| a. ?:  | A. void cat :: cat() {  |
| D. []  | Teet=4;}  |
| C -  | B. cat::cat(Int f){feet=f;}   |
| d. None of These   | C. cat::cat(Void){feet=8;}  |
|  | D. cat::cat(int f){this-  |
|  | >feet=t;}   |
| <ul> <li>9. Typical user defined signal handler functions perform actions such as</li> <li>i. Abort process immediately without further ado</li> </ul> | 10. What is the name given to the process initializing a microcomputer with its OS?                                 |
| ii. Perform minor house keeping  | A. Cold Booting   |
| prior to resumption  | B. Booting  |
| III. ROII back process state to last   | C. Warm Booting   |
| iv. Tidy up to process abortion  | D. None of these  |
| A. 1&2   |   |
| B. 2&4   |   |
| C. 3   |   |
| D. 4   |   |
| 11. Desirable attributes for memory<br>management include  | 12. Major expressions used with find<br>command to select file is it has been<br>accessed in more than 365 days, is |
| A.Protection- such memory should be  |   |
| protected against being written on by  | Aatime +365   |
| other processes  | Bmtime +365   |
| B.Encryption- ability to encrypt data  | Catime -365   |
| with a randomly selected key that is   | Dmtime -365   |
| discarded after use without being  |   |
| disclosed so that data can never read  |   |
| again.   |   |
| C.Uniform access rates-ability to  |   |
| retard faster data fetch rates so that   |   |
| all data fetches are uniformly   |   |
| performed at the least fast data fetch   |   |
| rate   |   |
| D.None of the above  |   |
| 13. Which of the following is not a basic  | 14. which file contains all permanent   |
| computer network topology?   | information and is updated during   |
|  | processing by transactions of data?   |
| A. Train topology  |   |
| B. Bus topology  | A. Master File  |

| C. Star topology  | B. Local File  |
|---|--|
| D. Ring topology  | C. Parent File   |
|   | D. Primary File  |
| <ul> <li>15. Which set option is used with vi editor to display line numbers on screen?</li> <li>A. nm</li> <li>B. nu</li> <li>C. ic</li> <li>D. li</li> </ul>  | <ul> <li>16. Assuming you have the environment variable ENV=.kshrc set, what is the entry in ur .kshrc or .profile that will save up to ur last 200 commands in a history list?</li> <li>A. HISTSIZE=200</li> <li>B. set history 200</li> <li>C. HISTORY=200</li> <li>D. seteny history 200</li> </ul>               |
|   |  |
| <ul> <li>17. You have 1MB of memory left on the HDD and when booting the system crashes. What is the reason?</li> <li>A. Not enough synchronous buffer</li> <li>B. Not enough contiguous memory in virtual memory</li> <li>C. Not enough space on the hard drive for the swap file.</li> <li>D. Not enough space on the hard drive for working memory.</li> </ul>                                       | <ul> <li>18. How do I remove a file with the name '-something' ?</li> <li>A. use the '' flag to rm</li> <li>B. Use '##' flag to rm</li> <li>C. Use the '-' flag to rm</li> <li>D. Use the '!' flag to rm.</li> </ul>   |
| <ul> <li>19. The customer is an internet search engine with hits from global customers exceeding 10 million per day. You identify Knowledge Management as the driving business issue. Which feature is most imp to this customer solution?</li> <li>A. Single system image</li> <li>B. Speed and performance</li> <li>C. Very large memory, very large database</li> <li>D. H/W Partitioning</li> </ul> | <ul> <li>20. Unlike function templates, when instantiating a class template, you must explicitly instantiate the class by giving?</li> <li>A. The parameters for the class templates</li> <li>B. The arguments for the class templates</li> <li>C. The variables for the class templates</li> <li>D. None</li> </ul> |



#### Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

|  | Test  | -II  |                                       |  |  |
|--|---|--|---------------------------------------|--|--|
| 1.   | What is static memory allocation?                           | What i   | s the output of the program?          |  |  |
|  | A.the allocation of memory is not at                        | #include <stdio.h><br/>int main()</stdio.h>                  |                                       |  |  |
|  | compile time but before the associated                      |  |                                       |  |  |
|  | program is executed   | {  |                                       |  |  |
|  | B.the allocation of memory at compile                       | exte   | rn int a;                             |  |  |
|  | time, before the associated program is                      | prin   | tf("%d\n", a);                        |  |  |
|  | executed  | retu   | rn 0;                                 |  |  |
|  | C. the allocation of memory at compile                      | }  |                                       |  |  |
|  | time, after the associated program is executed.             | int a=2  | 20;                                   |  |  |
|  |   | A.   | 0                                     |  |  |
|  | D.None of the above   | В.   | 20                                    |  |  |
|  |   | C.   | 10                                    |  |  |
|  |   | D.   | 30                                    |  |  |
|  |   |  |                                       |  |  |
| 2.   | What are the basic concepts of object oriented programming? | 3.   | What are the types of STL containers? |  |  |
| A.   | Data Hiding and Encapsulation                               |  | A.Sequential                          |  |  |
| B  | Inheritance   |  | B.Associative                         |  |  |
| C.   | Polymorphisim   |  | C.Unordered.                          |  |  |
| С.<br>D  |   |  | i) A,B and C.                         |  |  |
| D.   |   |  | ii) Only A and B.                     |  |  |
|  |   |  | iii) Only B and C.                    |  |  |
|  |   |  | iv) None of the above.                |  |  |
|  |   |  |                                       |  |  |
| 4. Which command is used to copy all files having the string chap and any two characters |   | 5. What hardware architectures are not supported by Ret Hat? |                                       |  |  |
| atter ti   | nat to the progs directory?                                 | Α.   | SPARC                                 |  |  |
| Α.   | cp chap?? progs   | В.   | IBM-compatible                        |  |  |
| B. (   | cp chap* progs  |  |                                       |  |  |

| C. cp chap[12] /progs/*.*  | C. Alpha  |  |  |
|--|---|--|--|
| D. cp chap?? /progs/*  | D. Macintosh  |  |  |
| E. None of the above   | E. None of the above  |  |  |
| Ans-A  | Ans-A   |  |  |
| <ul> <li>6. Format flags may be combined using</li> <li>A. the bitwise OR operator ( )</li> <li>B. the logical OR operator (  )</li> <li>C. the bitwise AND operator (&amp;)</li> <li>D. the logical AND operator (&amp;&amp;)</li> <li>Ans-A</li> </ul> | <ul> <li>7. What is the difference between the 8031 and the 8051?</li> <li>A. The 8031 has no interrupts.</li> <li>B. The 8031 is ROM-less.</li> <li>C. The 8051 is ROM-less.</li> <li>D. The 8051 has 64 bytes more memory.</li> <li>Ans- B</li> </ul> |  |  |



Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

| Tes                                      | st-III                                      |
|--|---|
| 21. What will be the output of following | 22. What will be the output?                |
| program?                                 |   |
| main()                                   | main()                                      |
| {  | {   |
| int i=1;                                 | int a[]={1,3,5,7};                          |
| for(;i<=32768;i++)                       | printf("%d",&a[3]-&a[1]);                   |
| printf("%d",i);                          | }   |
| }  |   |
|  | a.1   |
| e. 32767                                 | h 2   |
| f. Infinite loop                         | c 3   |
| g. 32768                                 | d.4   |
| h. None                                  | u.4   |
| 23. What will be the output of following | 24. What will be the O/P?                   |
| program?                                 | main()                                      |
| {  | {   |
| int i=0;                                 | struct xyz {                                |
| switch(i)                                | int i;                                      |
| {  | }:  |
| case 0:                                  | struct xvz *p:                              |
| i++;                                     | struct xvz a:                               |
| printf("%d",i);                          | p=&a:                                       |
| case 1:                                  | p->i=10:                                    |
| printf("%d",i);                          | printf("%d".(*p).i):                        |
| case 1:                                  | }   |
| printf("%d",i);                          | ſ   |
| }  | a.0   |
| }  | b.10  |
| e 1 1 0                                  | c.Garbage Value                             |
| f. 0.1.1                                 | d.Compile Time Error                        |
| g. 111                                   |   |
| h. None                                  |   |
| 25. What is the storage required for the | 26. What is the part of compiler that keeps |
| name "George"?                           | track of names and their attributes?        |
| e. Six Bits of Storage                   |   |
| t. Six bytes of Storage                  | a. Compile Table                            |
| g. Six pixels of stirage                 | b. Symbol Table                             |
| II. SIX NIIU DYLES                       | c. Table                                    |

|  | d. Logical Table  |
|--|---|
| 27. Which of the following operators cannot be overloaded in C++?  | 28. Which constructor is invalid for class cat?   |
| a. ?:<br>b. []   | A. void cat :: cat() {<br>feet=4;}  |
| c -  | B. cat::cat(int f){feet=f;}   |
| d. None of These   | C. cat::cat(void){feet=8;}  |
|  | D. cat::cat(int f){this-  |
|  | >feet=f;}   |
| <ul> <li>29. Typical user defined signal handler functions perform actions such as iv.</li> <li>Abort process immediately without further ado</li> </ul> | 30. What is the name given to the process initializing a microcomputer with its OS?                               |
| v. Perform minor house keeping   | A. Cold Booting   |
| prior to resumption  | B. Booting  |
| VI. ROIL DACK process state to last  | C. Warm Booting   |
| iv. Tidy up to process abortion  | D. None of these  |
| A. 1&2   |   |
| B. 2&4   |   |
| C. 3   |   |
| D. 4   |   |
| 31. Desirable attributes for memory management include   | 32. Major expressions used with find<br>command to select file is it has been                                     |
| A Protection- such memory should be  |   |
| protected against being written on by  | Aatime +365   |
| other processes  | Bmtime +365   |
| B Encryption-ability to encrypt data   | Catime -365   |
| with a randomly selected key that is   | Dmtime -365   |
| discarded after use without being  |   |
| disclosed so that data can never read  |   |
| again  |   |
| C Uniform access rates-ability to retard   |   |
| faster data fetch rates so that all data   |   |
| fetches are uniformly performed at the   |   |
| least fast data fetch rate   |   |
|  |   |
| D.None of the above  |   |
| 33. Which of the following is not a basic computer network topology?   | 34. which file contains all permanent<br>information and is updated during<br>processing by transactions of data? |
| A. Train topology  |   |
| B. Bus topology  | A. Master File  |
| C. Star topology   | B. Local File   |

| D. Ring topology  | C. Parent File   |
|---|--|
|   | D. Primary File  |
| <ul> <li>35. Which set option is used with vi editor to display line numbers on screen?</li> <li>A. nm</li> <li>B. nu</li> <li>C. ic</li> <li>D. li</li> </ul>  | <ul> <li>36. Assuming you have the environment variable ENV=.kshrc set, what is the entry in ur .kshrc or .profile that will save up to ur last 200 commands in a history list?</li> <li>A. HISTSIZE=200</li> <li>B. set history 200</li> <li>C. HISTORY=200</li> <li>D. setenv history 200</li> </ul>               |
| <ul> <li>37. You have 1MB of memory left on the HDD and when booting the system crashes. What is the reason?</li> <li>A. Not enough synchronous buffer</li> <li>B. Not enough contiguous memory in virtual memory</li> <li>C. Not enough space on the hard drive for the swap file.</li> <li>D. Not enough space on the hard drive for working memory.</li> </ul>   | <ul> <li>38. How do I remove a file with the name '- something' ?</li> <li>A. use the '' flag to rm</li> <li>B. Use '##' flag to rm</li> <li>C. Use the '-' flag to rm</li> <li>D. Use the '!' flag to rm.</li> </ul>  |
| <ul> <li>39. The customer is an internet search<br/>engine with hits from global customers<br/>exceeding 10 million per day. You<br/>identify Knowledge Management as<br/>the driving business issue. Which<br/>feature is most imp to this customer<br/>solution?</li> <li>A. Single system image</li> <li>B. Speed and performance</li> <li>C. Very large memory, very large<br/>database</li> <li>D. H/W Partitioning</li> </ul> | <ul> <li>40. Unlike function templates, when instantiating a class template, you must explicitly instantiate the class by giving?</li> <li>A. The parameters for the class templates</li> <li>B. The arguments for the class templates</li> <li>C. The variables for the class templates</li> <li>D. None</li> </ul> |



Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

| Test-IV                                      |                  |  |                                      |                            |  |
|--|------------------|--|--------------------------------------|----------------------------|--|
| In private inheritance derived class members |                  |  | The output of an OR Gate is LOW when |                            |  |
| can access base class members that are       |                  |  |                                      |                            |  |
|  |                  |  | Α.                                   | All inputs are LOW         |  |
| 1) Public 2) Priva                           | ate 3) Protected |  | В.                                   | Any Input is LOW           |  |
|  |                  |  | C.                                   | Any input is high          |  |
| Α.   | 1 & 2            |  | D.                                   | All inputs are HIGH        |  |
| В.   | 1&3              |  |                                      |                            |  |
| С.   | 2 & 3            |  |                                      |                            |  |
| D.   | 1,2 & 3          |  |                                      |                            |  |
| What will be the                             | e O/P?           | What   | will be th                           | ne O/P?                    |  |
|  |                  |  |                                      |                            |  |
| main()                                       |                  | main()   |                                      |                            |  |
| {  |                  | {  | _                                    |                            |  |
| int i=3,a=4,n;                               |                  | int i  | =0;                                  |                            |  |
| float t=4.2;                                 |                  | swit   | ch(i){                               |                            |  |
| n = a*a / i + i                              | / 2 * t + 2 + t; | ca   | se 0 : pr                            | intf("%d",i);break;        |  |
| printf("%d",n                                | );               | ca   | se 1 : pr                            | intf("%d",i);break;        |  |
| }  |                  | }  |                                      |                            |  |
| Α.   | 14               | }  |                                      |                            |  |
| В.   | 15.4             |  | Α.                                   | Compile-time error         |  |
| С.   | 15               |  | В.                                   | 0                          |  |
| D.   | None of these    |  | C.                                   | 1                          |  |
|  |                  |  | D.                                   | Run-time error             |  |
| What will be the                             | e O/P?           | what i   | s the ele                            | ctronic signal that cause  |  |
|  |                  | compu  | iter to st                           | top current program?       |  |
| main()                                       |                  |  |                                      |                            |  |
| {  |                  |  | Α.                                   | signal                     |  |
| int q=2,d=3,st                               | ·.<br>·,         |  | В.                                   | interrupt                  |  |
| st=q*d/4-12/2                                | 12+12/3*16/d;    |  | C.                                   | shell                      |  |
| printf("st=%d                                | ",st);           |  | D.                                   | command                    |  |
| }  |                  |  |                                      |                            |  |
| Α.   | 21               |  |                                      |                            |  |
| В.   | 21,0             |  |                                      |                            |  |
| С.   | 21.2             |  |                                      |                            |  |
| D.   | None of these    |  |                                      |                            |  |
| which is the language for transformational   |                  | Which two entities(reading from left to right) |                                      |                            |  |
| programming?                                 |                  | are connected by the dot operator(or class     |                                      |                            |  |
|  |                  | memb   | er acces                             | s operator)?               |  |
| Α.   | APP              |  |                                      |                            |  |
| В.   | KIMWITU          |  | Α.                                   | A class member and a class |  |
| C.   | MEMPHIS          | object   |                                      |                            |  |
| D.   | TXL              | -  | В.                                   | A class object and a class |  |

|                |                                    | C.                | A class and a member of that         |
|----------------|------------------------------------|-------------------|--------------------------------------|
|                |                                    | class             |                                      |
|                |                                    | D.                | A class obiect and a member of       |
|                |                                    | that class        |                                      |
| What is the cy | cle speed for high-end business    | The working s     | et hypothesis in paging schemes      |
| PCs servers a  | nd workstations?                   | for memory m      | nanagement is the hypothesis that    |
|                |                                    | for memory n      | indigenient is the hypothesis that   |
| Δ              | 75-200 MHz                         | Δ                 | the proportion of a process's        |
| B              | 166-233MHz                         | virtual memo      | ry that is supported by physical     |
| Б.<br>С        | 233-450MHz                         | memory shou       | Id reflect the proportion of its     |
| с.<br>D        | over 1 Gbz                         | virtual memor     | ry that it referaces frequently      |
| D.             |                                    |                   | if the memory management             |
|                |                                    | D.                | in the memory management             |
|                |                                    | system can pr     | ovide a process with enough          |
|                |                                    | then it will av   | no all the pages in its working set, |
|                |                                    | then it will ex   | perience a low fault rate            |
|                |                                    |                   | A process will experience a zero     |
|                |                                    | fault rate if all | I the pages it will reference are    |
|                |                                    | brought into r    | nemory before it references them     |
|                |                                    | D.                | none of these                        |
| Return addres  | is will be returned by function to | If $(A > B)$      |                                      |
|                |                                    | F=F(G);           |                                      |
| А.             | Pushes to the stack by call        | else if $(B > C)$ |                                      |
| В.             | Pushes to the stack after call     | F=G(G);           |                                      |
| C.             | None of the above                  | In this , for 75  | % times A > B and 25% times B >      |
| D.             | Both (a) and (b)                   | C then, if 1000   | 00 instructions are there, what      |
|                |                                    | will be the rat   | io of F to G?                        |
|                |                                    |                   |                                      |
|                |                                    | А.                | 7500:2500                            |
|                |                                    | В.                | 7500:625                             |
|                |                                    | С.                | 7500:625                             |
|                |                                    | D.                | None of the above                    |
| In a compiler  | there is 36 bit for a word and to  | int zap(int n)    |                                      |
| store a charac | ter 8bits are needed. IN this to   | {                 |                                      |
| store a charac | ter two words are appended         | if(n<=1)          |                                      |
| .Then for stor | ing a K characters string, How     | return 1;         |                                      |
| many words a   | re needed.                         | else              |                                      |
|                |                                    | return za         | p(n-3) + zap(n-1);                   |
| Α.             | 2k/9                               | }                 |                                      |
| В.             | (2k+8)/9                           | The call zap(6    | ) gives the result as?               |
| С.             | (k+8)/9                            |                   |                                      |
| D.             | 2*(k+8)/9                          | Α.                | 8                                    |
|                |                                    | В.                | 9                                    |
|                |                                    | С.                | 6                                    |
|                |                                    | D.                | 12                                   |
| Virtual memo   | ry size depends on                 | Critical section  | n is                                 |
|                | -                                  |                   |                                      |
| Α.             | address lines                      | А.                | statements which are not             |
| В.             | data bus                           | accessing sha     | red resourses                        |
| C.             | disc space                         | B.                | statements which are accessing       |
| D.             | a & c                              | shared resour     | rses                                 |

|  |                        | С.            | part of code where exception |
|--|------------------------|---------------|------------------------------|
|  |                        | can be thrown |                              |
|  |                        | D.            | None of the above            |
| load a   |                        |               |                              |
| mul a  |                        | Assignment op | erator targets to            |
| store t1                                       |                        |               |                              |
| load b   |                        | Α.            | L-value                      |
| mul b  |                        | В.            | H-value                      |
| store t2                                       |                        | С.            | None of the above            |
| mul t2   |                        | D.            | Both (a) and (b)             |
| add t1   |                        |               |                              |
| Then the cont                                  | tent in accumulator is |               |                              |
|  |                        |               |                              |
| Α.   | a**2+b**4              |               |                              |
| В.   | a**2-b**4              |               |                              |
| С.   | b**2-a**4              |               |                              |
| D.   | None of the above      |               |                              |
|  |                        |               |                              |
| Convert the infix to postfix for A-(B+C)*(D/E) |                        |               |                              |
| А.   | ABC+DE/*-              |               |                              |
| В.   | ABC-DE/*-              |               |                              |
| C.   | ABC-DE*/-              |               |                              |
| D.   | None of the above      |               |                              |
|  |                        |               |                              |



**Test-V** 

|  | 4. | What is static memory allocation?  | Wł                           | nati | is the output of the program?         |  |
|--|----|--|------------------------------|------|---------------------------------------|--|
|  |    | A the allocation of memory is  | #include <stdio.h></stdio.h> |      |                                       |  |
|  |    | <ul> <li>not at compile time but before<br/>the associated program is<br/>executed</li> <li>B.the allocation of memory at<br/>compile time, before the<br/>associated program is<br/>executed</li> </ul> | int main()                   |      |                                       |  |
|  |    |  | {                            |      |                                       |  |
|  |    |  |                              | ext  | ern int a;                            |  |
|  |    |  |                              | prir | ntf("%d\n", a);                       |  |
|  |    |  | return 0;                    |      |                                       |  |
|  |    |  | }                            |      |                                       |  |
|  |    |  | int                          | a=   | 20;                                   |  |
|  |    | C. the allocation of memory at   |                              | E.   | 0                                     |  |
|  |    | compile time, after the associated program is  |                              | F.   | 20                                    |  |
|  |    |  |                              | G.   | 10                                    |  |
|  |    | executed.  |                              | Η.   | 30                                    |  |
|  |    | D.None of the above  |                              |      |                                       |  |
|  | 5. | What are the basic concepts of object oriented programming?  |                              | 6.   | What are the types of STL containers? |  |
|  | E. | Data Hiding and Encapsulation  |                              |      | A.Sequential                          |  |
|  | F. | Inheritance  |                              |      | B.Associative                         |  |
|  | G. | Polymorphisim  |                              |      | C.Unordered.                          |  |
|  | н. | All of the Above   |                              |      | i) A,B and C.                         |  |
|  |    |  |                              |      | ii) Only A and B.                     |  |
|  |    |  |                              |      | iii) Only B and C.                    |  |
|  |    |  |                              |      | iv) None of the above.                |  |
|  |    |  |                              |      |                                       |  |

| 4. Which command is used to copy all files having the string chap and any two characters after that to the progs   |  | 5. Wha<br>not sup<br>A.  | t hardware architectures are ported by Ret Hat?  |
|--|--|--|--|
| A.<br>B.<br>C.<br>D.<br>E.<br><b>Ans-A</b>   | cp chap?? progs<br>cp chap* progs<br>cp chap[12] /progs/*.*<br>cp chap?? /progs/*<br>None of the above | B.<br>C.<br>D.<br>E.<br><b>Ans-A</b>   | IBM-compatible<br>Alpha<br>Macintosh<br>None of the above  |
| <ul> <li>6. Format flags may be combined using</li> <li>A. the bitwise OR operator ( )</li> <li>B. the logical OR operator (  )</li> <li>C. the bitwise AND operator (&amp;)</li> <li>D. the logical AND operator (&amp;&amp;)</li> <li>Ans-A</li> </ul> |  | <ul> <li>7. Wha the 803</li> <li>A.</li> <li>B.</li> <li>C.</li> <li>D. memor</li> <li>Ans- B</li> </ul> | at is the difference between<br>31 and the 8051?<br>The 8031 has no interrupts.<br>The 8031 is ROM-less.<br>The 8051 is ROM-less.<br>The 8051 has 64 bytes more<br>ty. |



### **Test-VI**

| In private inheritance derived class members   | The output of an OR Gate is LOW when           |  |  |
|--|--|--|--|
| can access base class members that are         | A All inputs are LOW                           |  |  |
| 1) Public 2) Private 2) Protected              | A. An inputs are LOW                           |  |  |
|  | C Any input is bigh                            |  |  |
| Λ 18.2   | D All inputs are HIGH                          |  |  |
| B 18.3   |  |  |  |
|  |  |  |  |
| $C. 2 \otimes 3$                               |  |  |  |
| 1,2 $0,2$ $0,2$ $1,2$ $0,3$                    | What will be the O/P2                          |  |  |
| What will be the O/P!                          | What will be the O/P!                          |  |  |
| main()   | main()   |  |  |
|  | {  |  |  |
| i int i=3 a=4 n·                               | int i=0:                                       |  |  |
| $f_{1} = 3, a = 4, n, f_{1}$                   | switch(i){                                     |  |  |
| $n - 2*2/i + i/2* + + 2 + + \cdot$             | case 0 : printf/"%d" i):break:                 |  |  |
| $n = a^{-}a^{-}a^{-}a^{-}a^{-}a^{-}a^{-}a^{-}$ | case 1 : printf("%d" i);break;                 |  |  |
|  |  |  |  |
|  |  |  |  |
| P 15 4   | S Compile time error                           |  |  |
| C 15   |  |  |  |
| C. 15<br>D. None of these                      |  |  |  |
| D. None of these                               | C. I<br>D. Bun time error                      |  |  |
| What will be the O/P2                          | D. Rui-tille error                             |  |  |
| What will be the O/P?                          | computer to stop surrent program?              |  |  |
| main()   | computer to stop current program?              |  |  |
| r (  | A signal                                       |  |  |
| 1  | A. Signal                                      |  |  |
| Int $q=2, q=3, st;$                            | B. Interrupt                                   |  |  |
| $Sl=q^{-}a/4-12/12+12/3^{-}16/a;$              | C. Shell                                       |  |  |
| printi( st=%d ,st);                            | D. command                                     |  |  |
| }  |  |  |  |
| A. 21  |  |  |  |
| B. 21,0  |  |  |  |
| C. 21.2  |  |  |  |
| D. None of these                               |  |  |  |
| which is the language for transformational     | Which two entities(reading from left to right) |  |  |
| programming?                                   | are connected by the dot operator(or class     |  |  |
|  | member access operator)?                       |  |  |
| A. APP   |  |  |  |
| B. KIMWITU                                     |  |  |  |

| C.             | MEMPHIS                            | Α.               | A class member and a class                  |
|----------------|------------------------------------|------------------|---|
| D.             | TXL                                | object           |   |
|                |                                    | В.               | A class object and a class                  |
|                |                                    | С.               | A class and a member of that                |
|                |                                    | class            |   |
|                |                                    | D.               | A class object and a member of              |
|                |                                    | that class       |   |
| What is the c  | ycle speed for high-end business   | The working      | set hypothesis in paging schemes            |
| PCs,servers, a | and workstations?                  | for memory       | management is the hypothesis that           |
|                |                                    |                  |   |
| Α.             | 75-200 MHz                         | Α.               | the proportion of a process`s               |
| В.             | 166-233MHz                         | virtual memo     | ory that is supported by physical           |
| C.             | 233-450MHz                         | memory sho       | uld reflect tha proportion of its           |
| D.             | over 1 Ghz                         | virtual memo     | ory that it referaces frequently            |
|                |                                    | В.               | if the memory management                    |
|                |                                    | system can       | provide a process with enough               |
|                |                                    | memory to I      | hold all the pages in its working           |
|                |                                    | set, then it v   | vill experience a low fault rate            |
|                |                                    | C.               | A process will experience a zero            |
|                |                                    | fault rate if a  | all the pages it will reference are         |
|                |                                    |                  | memory before it references them            |
| Doturn oddro   | as will be returned by function to | U.               | none of these                               |
| Return addre   | ss will be returned by function to | F = F(C)         |   |
| •              | Duchos to the stack by call        | F=F(G);          |   |
| A.             | Pushes to the stack by call        | E = C(C)         | )   |
| В.             | None of the above                  | F=G(G),          | 15% times $A > B$ and $25%$ times $B > 10%$ |
|                | Both (a) and (b)                   | C then if 10     | 000 instructions are there what             |
| D.             |                                    | will be the ra   | atio of E to G?                             |
|                |                                    |                  |   |
|                |                                    | Α.               | 7500:2500                                   |
|                |                                    | В.               | 7500:625                                    |
|                |                                    | С.               | 7500:625                                    |
|                |                                    | D.               | None of the above                           |
| In a compiler  | there is 36 bit for a word and to  | int zap(int n)   |   |
| store a chara  | cter 8bits are needed. IN this to  | {                |   |
| store a chara  | cter two words are appended        | if(n<=1)         |   |
| .Then for sto  | ring a K characters string, How    | return 1         | ;   |
| many words     | are needed.                        | else             |   |
|                |                                    | return z         | ap(n-3) + zap(n-1);                         |
| Α.             | 2k/9                               | }                |   |
| В.             | (2k+8)/9                           | The call zap(    | 6) gives the result as?                     |
| С.             | (k+8)/9                            |                  |   |
| D.             | 2*(k+8)/9                          | Α.               | 8   |
|                |                                    | В.               | 9   |
|                |                                    | C.               | 6   |
|                |                                    | D.               | 12  |
| Virtual memo   | ory size depends on                | Critical section | on is                                       |
| А.             | address lines                      | A.               | statements which are not                    |
| В.             | data bus                           | accessing sh     | ared resourses                              |

| C.             | disc space                        | В.                         | statements which are         |  |
|----------------|-----------------------------------|----------------------------|------------------------------|--|
| D. a&c         |                                   | accessing shared resourses |                              |  |
|                |                                   | С.                         | part of code where exception |  |
|                |                                   | can be throw               | n                            |  |
|                |                                   | D.                         | None of the above            |  |
| load a         |                                   |                            |                              |  |
| mul a          |                                   | Assignment o               | perator targets to           |  |
| store t1       |                                   |                            |                              |  |
| load b         |                                   | Α.                         | L-value                      |  |
| mul b          |                                   | В.                         | H-value                      |  |
| store t2       |                                   | С.                         | None of the above            |  |
| mul t2         |                                   | D.                         | Both (a) and (b)             |  |
| add t1         |                                   |                            |                              |  |
| Then the cont  | ent in accumulator is             |                            |                              |  |
|                |                                   |                            |                              |  |
| Α.             | a**2+b**4                         |                            |                              |  |
| В.             | a**2-b**4                         |                            |                              |  |
| С.             | b**2-a**4                         |                            |                              |  |
| D.             | None of the above                 |                            |                              |  |
|                |                                   |                            |                              |  |
|                |                                   |                            |                              |  |
| Convert the ir | nfix to postfix for A-(B+C)*(D/E) |                            |                              |  |
|                |                                   |                            |                              |  |
| Α.             | ABC+DE/*-                         |                            |                              |  |
| В.             | ABC-DE/*-                         |                            |                              |  |
| C.             | ABC-DE*/-                         |                            |                              |  |
| D.             | None of the above                 |                            |                              |  |
|                |                                   |                            |                              |  |



## **Test-VII**

| In private inheritance derived class members | The output of an OR Gate is LOW when           |  |  |
|--|--|--|--|
| can access base class members that are       |  |  |  |
|  | A. All inputs are LOW                          |  |  |
| 1) Public 2) Private 3) Protected            | B. Any Input is LOW                            |  |  |
|  | C. Any input is high                           |  |  |
| A. 1&2                                       | D. All inputs are HIGH                         |  |  |
| B. 1&3                                       |  |  |  |
| C. 2&3                                       |  |  |  |
| D. 1,2 & 3                                   |  |  |  |
| What will be the O/P?                        | What will be the O/P?                          |  |  |
|  |  |  |  |
| main()                                       | main()   |  |  |
| {  | {  |  |  |
| int i=3,a=4,n;                               | int i=0;                                       |  |  |
| float t=4.2;                                 | switch(i){                                     |  |  |
| n = a*a / i + i / 2 * t + 2 + t;             | case 0 : printf("%d",i);break;                 |  |  |
| printf("%d",n);                              | <pre>case 1 : printf("%d",i);break;</pre>      |  |  |
| }  | }  |  |  |
| A. 14  | }  |  |  |
| B. 15.4                                      | A. Compile-time error                          |  |  |
| C. 15  | B. 0   |  |  |
| D. None of these                             | C. 1   |  |  |
|  | D. Run-time error                              |  |  |
| What will be the O/P?                        | what is the electronic signal that cause       |  |  |
|  | computer to stop current program?              |  |  |
| main()                                       |  |  |  |
| {  | A. signal                                      |  |  |
| int q=2,d=3,st;                              | B. interrupt                                   |  |  |
| st=q*d/4-12/12+12/3*16/d;                    | C. shell                                       |  |  |
| printf("st=%d",st);                          | D. command                                     |  |  |
| }  |  |  |  |
| A. 21  |  |  |  |
| B. 21,0                                      |  |  |  |
| C. 21.2                                      |  |  |  |
| D. None of these                             |  |  |  |
| which is the language for transformational   | Which two entities(reading from left to right) |  |  |
| programming?                                 | are connected by the dot operator(or class     |  |  |
|  | member access operator)?                       |  |  |
| A. APP                                       |  |  |  |
| B. KIMWITU                                   |  |  |  |

| C.             | MEMPHIS                            | Α.               | A class member and a class                  |
|----------------|------------------------------------|------------------|---|
| D.             | TXL                                | object           |   |
|                |                                    | В.               | A class object and a class                  |
|                |                                    | С.               | A class and a member of that                |
|                |                                    | class            |   |
|                |                                    | D.               | A class object and a member of              |
|                |                                    | that class       |   |
| What is the c  | ycle speed for high-end business   | The working      | set hypothesis in paging schemes            |
| PCs,servers, a | and workstations?                  | for memory       | management is the hypothesis that           |
|                |                                    |                  |   |
| Α.             | 75-200 MHz                         | Α.               | the proportion of a process`s               |
| В.             | 166-233MHz                         | virtual memo     | ory that is supported by physical           |
| C.             | 233-450MHz                         | memory sho       | uld reflect tha proportion of its           |
| D.             | over 1 Ghz                         | virtual memo     | ory that it referaces frequently            |
|                |                                    | В.               | if the memory management                    |
|                |                                    | system can       | provide a process with enough               |
|                |                                    | memory to I      | hold all the pages in its working           |
|                |                                    | set, then it v   | vill experience a low fault rate            |
|                |                                    | C.               | A process will experience a zero            |
|                |                                    | fault rate if a  | all the pages it will reference are         |
|                |                                    |                  | memory before it references them            |
| Doturn oddro   | as will be returned by function to | U.               | none of these                               |
| Return addre   | ss will be returned by function to | F = F(C)         |   |
| •              | Duchos to the stack by call        | F=F(G);          |   |
| A.             | Pushes to the stack by call        | E = C(C)         | )   |
| В.             | None of the above                  | F=G(G),          | 15% times $A > B$ and $25%$ times $B > 10%$ |
|                | Both (a) and (b)                   | C then if 10     | 000 instructions are there what             |
| D.             |                                    | will be the ra   | atio of E to G?                             |
|                |                                    |                  |   |
|                |                                    | Α.               | 7500:2500                                   |
|                |                                    | В.               | 7500:625                                    |
|                |                                    | С.               | 7500:625                                    |
|                |                                    | D.               | None of the above                           |
| In a compiler  | there is 36 bit for a word and to  | int zap(int n)   |   |
| store a chara  | cter 8bits are needed. IN this to  | {                |   |
| store a chara  | cter two words are appended        | if(n<=1)         |   |
| .Then for sto  | ring a K characters string, How    | return 1         | ;   |
| many words     | are needed.                        | else             |   |
|                |                                    | return z         | ap(n-3) + zap(n-1);                         |
| Α.             | 2k/9                               | }                |   |
| В.             | (2k+8)/9                           | The call zap(    | 6) gives the result as?                     |
| С.             | (k+8)/9                            |                  |   |
| D.             | 2*(k+8)/9                          | Α.               | 8   |
|                |                                    | В.               | 9   |
|                |                                    | C.               | 6   |
|                |                                    | D.               | 12  |
| Virtual memo   | ory size depends on                | Critical section | on is                                       |
| А.             | address lines                      | A.               | statements which are not                    |
| В.             | data bus                           | accessing sh     | ared resourses                              |

| C.             | disc space                        | В.                         | statements which are         |  |
|----------------|-----------------------------------|----------------------------|------------------------------|--|
| D. a&c         |                                   | accessing shared resourses |                              |  |
|                |                                   | C.                         | part of code where exception |  |
|                |                                   | can be throw               | n                            |  |
|                |                                   | D.                         | None of the above            |  |
| load a         |                                   |                            |                              |  |
| mul a          |                                   | Assignment o               | perator targets to           |  |
| store t1       |                                   |                            |                              |  |
| load b         |                                   | Α.                         | L-value                      |  |
| mul b          |                                   | В.                         | H-value                      |  |
| store t2       |                                   | С.                         | None of the above            |  |
| mul t2         |                                   | D.                         | Both (a) and (b)             |  |
| add t1         |                                   |                            |                              |  |
| Then the cont  | ent in accumulator is             |                            |                              |  |
|                |                                   |                            |                              |  |
| Α.             | a**2+b**4                         |                            |                              |  |
| В.             | a**2-b**4                         |                            |                              |  |
| С.             | b**2-a**4                         |                            |                              |  |
| D.             | None of the above                 |                            |                              |  |
|                |                                   |                            |                              |  |
|                |                                   |                            |                              |  |
| Convert the ir | nfix to postfix for A-(B+C)*(D/E) |                            |                              |  |
|                |                                   |                            |                              |  |
| А.             | ABC+DE/*-                         |                            |                              |  |
| В.             | ABC-DE/*-                         |                            |                              |  |
| C.             | ABC-DE*/-                         |                            |                              |  |
| D.             | None of the above                 |                            |                              |  |
|                |                                   |                            |                              |  |



#### Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

## **Test-VIII**

| A self contained block of statements that        | main() { char $*$ n="GOOD": char a[ ]="GOOD":         |
|--|---|
| perform a coherent task of some kind is called a | $rintf("\n sizeof(n) = %d$                            |
| 1 Function                                       | size of $(*n) = %d$ strlen(n) = %d" size of (n)       |
| 2 Program  | sizeof(*p)  |
| 3 Monitor  | strlen(n)): nrintf("\n sizeof(a) = %d_strlen(a) =     |
|  | d'' sizeof(a)   |
|  | strlen(a)): }   |
|  | 1 syntax error  |
|  | 2. Compiler Error                                     |
|  | $2 \cdot \text{completended}$                         |
|  | $5. \sin(a) = 5, \sin(a) = 4,$                        |
|  | 4. $SizeO(p) = 2$ , $SizeO((p) = 1$ , $SirieI(p) = 4$ |
| The Clanguage includes the header file           | Si2eOI(d) = 5, $SiIIeII(d) = 4$                       |
| standard input 9 output in                       | what would be the equivalent pointer                  |
|  | expression for referring the array                    |
| 1. conto.n library                               |   |
| 2. stalo.n library                               | 1. $((a+i)+j+k+i)$                                    |
| 3. #Include library                              | 2. $((((a+1)+j)+K)+1)$                                |
| 4. stalib.n library                              | 3. (((a+i)+j)+K+i)                                    |
|  | 4. *(*(*(*(a+i)+j)+k)+i)                              |
| The maximum value that an integer constant       | Which of the following true about FILE *fp            |
| can have is                                      |   |
| 1. 1.7014e+38                                    | 1. FILE is a buffered stream                          |
| 2. –1.7014e+38                                   | 2. FILE is a stream                                   |
| 3. 32767   | 3. FILE is a keyword in C for representing files      |
| 432767   | and fp is a variable of FILE type.                    |
|  | 4. FILE is a structure and fp is a pointer to the     |
|  | structure of FILE type                                |
| The output of the following code is:             | Which is the Boolean operator logical AND ?           |
|  | 1. &&   |
| void main()                                      | 2.  |
| {  | 3.  |
| int a = 1, b=2;                                  | 4. &  |
| int *ip;   |   |
| ip=&a  |   |
| b=*ip;   |   |
| printf("%d", b);                                 |   |
| }  |   |
|  |   |
| 1.2  |   |
| 2.0  |   |
| 3. 100   |   |

| 4.1   |  |
|---|--|
| What is the output of this C code?(assume the | Number of bytes in memory taken by the               |
| header files also)                            | below structure is?                                  |
|   |  |
| int main()                                    | struct test  |
| {   | {  |
| FILE *fp = stdout;                            | int k;   |
| stderr = fp;                                  | char c;  |
| fprintf(stderr, "%s", "hello");               | };   |
| }   | 1. Multiple of word size                             |
| 1. Depends on the standard                    | 2. integer size+character size                       |
| 2. hello                                      | 3. Depends on the platform                           |
| 3. Undefined behaviour                        | 4. Multiple of integer size                          |
| 4. Compilation error                          |  |
| What is the output of the following code      | What is the size of float in 32 bit compiler         |
| int n=0, m:                                   | 1. 1   |
| for $(m=1: m <= n+1: m++)$                    | 2.4  |
| printf("%d", m):                              | 3.8  |
| 1 1   | 4 16   |
| 2.6   | 1. 10  |
| 3.2   |  |
| 4.0   |  |
| What will be the output of the following      | Which is valid C expression?                         |
| statements ?                                  | 1 int $4my$ num = 100000:                            |
|   | 2. int $\frac{1}{2}$ int $\frac{1}{2}$ num = 100000, |
| long int $a = scanf("% d% d" & a & a)$        | 2. int $y_1 = 10000$ ,                               |
| rintf("%Id" a)                                | 4  int  my  num = 100000,                            |
|   | 4. Int my num – 1000,                                |
| 1.0   |  |
| 2. Z  |  |
| 3. garbage value                              |  |
| 4. EIIUI                                      | The lifetimeets variable is                          |
| Lingly de                                     |  |
| 1. Include                                    |  |
| 2.#   | 2.binding time                                       |
| 3. {  | 3.scope  |
| 4. main()                                     | 4, invoking  |
|   | Which header file should be included to use          |
| Variables inside parenthesis of functions     | functions like malloc() and calloc()?                |
| declarations have level access                | 1. string.h  |
| 1. Universal                                  | 2. stdlib.h  |
| 2. Global                                     | 3. memory.h  |
| 3. Module                                     | 4. dos.h   |
| 4. Local                                      |  |
|   |  |



Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

#### Test-IX

| A byte addressable computer has memory   |  | In round robin scheduling, if time quantum is  |  |  |
|--|--|--|--|--|
| capacity of 2 power m Kbytes and can perform   |  | too large then it degenerates to   |  |  |
| 2 power n operations an instruction involving  |  | -  | -  |  |
| three operands and one operator needs  |  | А.   | ECFS   |  |
| maximum ofbits   |  | В.   | FCFS   |  |
|  |  | C.   | GCFS   |  |
| Α.   | 3m + n   | D.   | None of the above  |  |
| B.   | 2m + n   |  |  |  |
| C  | 5m + n   |  |  |  |
| D.   | None of the above  |  |  |  |
| Question No ·  | 3  | Question No .  | 4  |  |
| A sorting algo   | rithm which can prove to be a  | What details   | should never be found in the ton   |  |
| hest time algo   | rithm in one case and a worst  | level of a ton-  | down design?   |  |
| time algorithm   | n in worst case i  |  | down design:   |  |
|  |  | Δ  | Details  |  |
| Δ  | Quick Sort   | R.   | Coding   |  |
| А.<br>В  | Hean Sort  | С.   | Decisions  |  |
| D.   | Merge Sort   | C.   | None of the above  |  |
| C.   | Insert Sort  | D.   |  |  |
| D.   | lisert sort  |  |  |  |
|  |  |  |  |  |
| Question No ·  | 5  | Question No.   | 6  |  |
| Question No :  | 5<br>Joading scheme, which loader  | Question No :<br>Banker's algo   | 6  |  |
| Question No :<br>In an absolute  | 5<br>loading scheme, which loader  | Question No :<br>Banker's algo   | 6<br>rithm for resource allocation deals   |  |
| Question No :<br>In an absolute<br>function is acc   | 5<br>loading scheme, which loader<br>complished by assembler   | Question No :<br>Banker's algo<br>with   | 6<br>rithm for resource allocation deals   |  |
| Question No :<br>In an absolute<br>function is acc   | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation   | Question No :<br>Banker's algo<br>with<br>A  | 6<br>rithm for resource allocation deals   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B  | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation   | Question No :<br>Banker's algo<br>with<br>A.<br><b>B</b>   | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br>Deadlock avoidance  |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.   | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation   | Question No :<br>Banker's algo<br>with<br>A.<br><b>B.</b>  | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery  |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D  | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation<br>Linking<br>Both (a) and (b)  | Question No :<br>Banker's algo<br>with<br>A.<br><b>B.</b><br>C.  | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br><b>D.</b>  | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation<br>Linking<br><b>Both (a) and (b)</b>   | Question No :<br>Banker's algo<br>with<br>A.<br><b>B.</b><br>C.<br>D.  | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.   | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation<br>Linking<br><b>Both (a) and (b)</b>   | Question No :<br>Banker's algo<br>with<br>A.<br><b>B.</b><br>C.<br>D.  | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.   | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation<br>Linking<br><b>Both (a) and (b)</b>   | Question No :<br>Banker's algo<br>with<br>A.<br><b>B.</b><br>C.<br>D.  | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.   | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation<br>Linking<br><b>Both (a) and (b)</b>   | Question No :<br>Banker's algo<br>with<br>A.<br>B.<br>C.<br>D.   | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Thrashing can   | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation<br>Linking<br><b>Both (a) and (b)</b><br>7<br>he avoided if   | Question No :<br>Banker's algo<br>with<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Which of the  | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Thrashing can   | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation<br>Linking<br><b>Both (a) and (b)</b><br>7<br>be avoided if   | Question No :<br>Banker's algo<br>with<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Which of the<br>best suited to  | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above<br>8<br>following communications lines is   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Thrashing can   | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation<br>Linking<br><b>Both (a) and (b)</b><br>7<br>be avoided if<br><b>The pages belonging to the</b>  | Question No :<br>Banker's algor<br>with<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Which of the<br>best suited to<br>applications?                        | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above<br>8<br>following communications lines is<br>interactive processing   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Thrashing can<br>A.<br>working set of                       | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation<br>Linking<br><b>Both (a) and (b)</b><br>7<br>be avoided if<br>The pages, belonging to the<br>f the programs are in main  | Question No :<br>Banker's algo<br>with<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Which of the<br>best suited to<br>applications?                         | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above<br>8<br>following communications lines is<br>interactive processing   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Thrashing can<br>A.<br>working set of<br>memory             | 5<br>loading scheme, which loader<br>complished by assembler<br>Reallocation<br>Allocation<br>Linking<br><b>Both (a) and (b)</b><br>7<br>be avoided if<br><b>The pages, belonging to the</b><br><b>f the programs, are in main</b>   | Question No :<br>Banker's algo<br>with<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Which of the<br>best suited to<br>applications?                         | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above<br>8<br>following communications lines is<br>interactive processing   |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Thrashing can<br>A.<br>working set of<br>memory<br>B        | <ul> <li>5</li> <li>loading scheme, which loader complished by assembler</li> <li>Reallocation Allocation Linking</li> <li>Both (a) and (b)</li> <li>7</li> <li>be avoided if</li> <li>The pages, belonging to the f the programs, are in main</li> <li>The speed of CPU is increased</li> </ul>                       | Question No :<br>Banker's algo<br>with<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Which of the<br>best suited to<br>applications?<br>A.<br>channels       | <ul> <li>6</li> <li>rithm for resource allocation deals</li> <li>Deadlock prevention</li> <li>Deadlock avoidance</li> <li>Deadlock recovery</li> <li>None of the above</li> <li>8</li> <li>following communications lines is interactive processing</li> <li>Narrowband channels and band</li> </ul> |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Thrashing can<br>A.<br>working set of<br>memory<br>B.<br>C  | <ul> <li>5</li> <li>loading scheme, which loader complished by assembler</li> <li>Reallocation Allocation Linking Both (a) and (b)</li> <li>7</li> <li>be avoided if</li> <li>The pages, belonging to the f the programs, are in main</li> <li>The speed of CPU is increased The speed of L/O processor are</li> </ul> | Question No :<br>Banker's algo<br>with<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Which of the<br>best suited to<br>applications?<br>A.<br>channels       | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br><b>Deadlock avoidance</b><br>Deadlock recovery<br>None of the above<br>8<br>following communications lines is<br>interactive processing<br>Narrowband channels and band<br>Simpley channels                                       |  |
| Question No :<br>In an absolute<br>function is acc<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Thrashing can<br>A.<br>working set of<br>memory<br>B.<br>C. | <ul> <li>5</li> <li>loading scheme, which loader complished by assembler</li> <li>Reallocation Allocation Linking Both (a) and (b)</li> <li>7</li> <li>be avoided if</li> <li>The pages, belonging to the f the programs, are in main</li> <li>The speed of CPU is increased The speed of I/O processor are</li> </ul> | Question No :<br>Banker's algo<br>with<br>A.<br>B.<br>C.<br>D.<br>Question No :<br>Which of the<br>best suited to<br>applications?<br>A.<br>channels<br>B. | 6<br>rithm for resource allocation deals<br>Deadlock prevention<br>Deadlock avoidance<br>Deadlock recovery<br>None of the above<br>8<br>following communications lines is<br>interactive processing<br>Narrowband channels and band<br>Simplex channels  |  |

| D.               | All of the above                  | D.   | Mixed                              |  |  |
|------------------|-----------------------------------|--|------------------------------------|--|--|
| Question No :    | 9                                 | Question No : 10                                 |                                    |  |  |
| A feasibility do | ocument should contain all of the | What is the main function of a data link content |                                    |  |  |
| following exce   | pt                                | monitor?   |                                    |  |  |
|                  |                                   |  |                                    |  |  |
| Α.               | Project name                      | А.   | To detect problems in              |  |  |
| В.               | Problem descriptions              | protocols  |                                    |  |  |
| С.               | Feasible alternative              | В.   | To determine the type of           |  |  |
| D.               | Data flow diagrams                | transmission                                     | used in a data link                |  |  |
|                  | -                                 | C.   | To determine the type of           |  |  |
|                  |                                   | switching use                                    | d in a data link                   |  |  |
|                  |                                   | D.   | To determine the flow of data      |  |  |
|                  |                                   |  |                                    |  |  |
| Question No :    | 11                                | Question No                                      | : 12                               |  |  |
| Which of the f   | ollowing is a broadband           | Which of the                                     | following memories has the         |  |  |
| communicatio     | ns channel?                       | shortest acce                                    | ss time?                           |  |  |
|                  |                                   |  |                                    |  |  |
| Α.               | Coaxial cable                     | Α.   | Cache memory                       |  |  |
| В.               | Fiber optic cable                 | В.   | Magnetic bubble memory             |  |  |
| С.               | Microwave circuits                | С.   | Magnetic core memory               |  |  |
| D.               | All of the above                  | D.   | RAM                                |  |  |
|                  |                                   |  |                                    |  |  |
| Question No :    | 13                                | Question No : 14                                 |                                    |  |  |
| A shift register | r can be used for                 | In which of the following page replacement       |                                    |  |  |
|                  |                                   |  | policies, Balady's anomaly occurs? |  |  |
| Α.               | Parallel to serial conversion     |  |                                    |  |  |
| В.               | Serial to parallel conversion     | Α.   | FIFO                               |  |  |
| С.               | Digital delay line                | В.   | LRU                                |  |  |
| D.               | All the above                     | С.   | LFU                                |  |  |
|                  |                                   | D.   | NRU                                |  |  |
|                  |                                   |  |                                    |  |  |
| Question No :    | 15                                | Question No : 16                                 |                                    |  |  |
| Subschema ca     | n be used to                      | The format specifier "-%d" is used for which     |                                    |  |  |
|                  |                                   | purpose in C                                     |                                    |  |  |
| Α.               | Create very different,            |  |                                    |  |  |
| personalised v   | iews of the same data             | Α.   | Left justifying a string           |  |  |
| В.               | Present information in            | В.   | Right justifying a string          |  |  |
| different form   | ats                               | С.   | Removing a string from the         |  |  |
| С.               | Hide sensitive information by     | console  |                                    |  |  |
| omitting fields  | from the sub-schema's             | D.   | Used for the scope specification   |  |  |
| description      |                                   | of a char[] vai                                  | riable                             |  |  |
| D.               | All of the above                  |  |                                    |  |  |
|                  | 4.7                               |  | 10                                 |  |  |
| Question No :    |                                   | Question NO                                      | . 10                               |  |  |
| virtual functio  | ns allow you to                   | ir the time qu                                   | antum is too large, Round Robin    |  |  |
|                  |                                   | scheduling de                                    | egenerates to                      |  |  |
| A.               | create an array of type pointer-  |  |                                    |  |  |
| το-base-class t  | nat can hold pointers to derived  | A.   | Snortest Job First Scheduling      |  |  |
| В.               | Create functions that have no     | B.   | Wultilevel Queue Scheduling        |  |  |
| body             |                                   | С.   | FCFS                               |  |  |

| C.  | Group objects of different          |   | D.   | None of the above   |
|---|-------------------------------------|---|--|---|
| function  | can all be accessed by the same     |   |  |   |
|   | Use the same function call to       |   |  |   |
| execute mem   | her functions of different objects  |   |  |   |
|   |                                     |   |  |   |
| Question No :   | 19                                  | Questi  | on No : 2  | 20  |
| What will be t  | he O/P?                             | What  | will be th   | ne O/P?   |
| int i;<br>i = 1;<br>i = i + 2 * i++<br>printf("%d",<br>A.<br>B.<br>C.<br>D. | ;<br>i);<br>2<br>3<br><b>4</b><br>5 | main()<br>{<br>FILE<br>fp1=<br>fput<br>fput<br>fclos<br>fclos<br>}<br><b>on san</b> | *fp1,*fp<br>fopen("o<br>fopen("o<br>c('A',fp1<br>c('B',fp2)<br>se(fsssp1<br>se(fp2)<br>A.<br><b>B.</b><br>ne file.<br>C.<br>D. | 2;<br>one","w")<br>one","w")<br>)<br>)<br>Compilation error<br><b>No error. But It will over writes</b><br>Contents will appended to the<br>Runtime error |



#### Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

#### Test-X

| A self contained block of statements that        | main() { char *p="GOOD"; char a[ ]="GOOD";         |
|--|--|
| perform a coherent task of some kind is called a | $printf("\n sizeof(p) = \%d.$                      |
| 1. Function                                      | sizeof(*p) = %d, strlen(p) = %d", sizeof(p),       |
| 2. Program                                       | sizeof(*p),  |
| 3. Monitor                                       | strlen(p)); printf("\n sizeof(a) = %d, strlen(a) = |
| 4. Structure                                     | %d", sizeof(a),                                    |
|  | <pre>strlen(a)); }</pre>                           |
|  | 1. syntax error                                    |
|  | 2. Compiler Error                                  |
|  | 3. sizeof(a) = 5, strlen(a) = 4,                   |
|  | 4. sizeof(p) = 2, sizeof(*p) = 1, strlen(p) = 4    |
|  | sizeof(a) = 5, strlen(a) = 4                       |
| The C language includes the header file          | What would be the equivalent pointer               |
| standard input & output in                       | expression for referring the array                 |
| 1. conio.h library                               | elementa[i][j][k][l]                               |
| 2. stdio.h library                               | 1. ((a+i)+j+k+l)                                   |
| 3. #include library                              | 2. ((((a+i)+j)+k)+l)                               |
| 4. stdlib.h library                              | 3. (((a+i)+j)+k+l)                                 |
|  | 4. *(*(*(*(a+i)+j)+k)+l)                           |
| The maximum value that an integer constant       | Which of the following true about FILE *fp         |
| can have is                                      |  |
| 1. 1.7014e+38                                    | 1. FILE is a buffered stream                       |
| 2. –1.7014e+38                                   | 2. FILE is a stream                                |
| 3. 32767   | 3. FILE is a keyword in C for representing files   |
| 432767   | and fp is a variable of FILE type.                 |
|  | 4. FILE is a structure and fp is a pointer to the  |
|  | structure of FILE type                             |
| The output of the following code is:             | Which is the Boolean operator logical AND ?        |
|  | 1. &&  |
| void main()                                      | 2.   |
|  | 3.   |
| int a = 1, b=2;                                  | 4. &   |
| int ⁼ip;   |  |
| ip=&a  |  |
| D = TP;  |  |
| ן אווונון י <i>ס</i> ט , <i>און,</i><br>ו נ      |  |
| ſ  |  |
| 1 2  |  |
| 2.0  |  |
| 3, 100   |  |
| 4.1  |  |

| What is the output of this C code?(assume the | Number of bytes in memory taken by the        |
|---|---|
| header files also)                            | below structure is?                           |
|   |   |
| int main()                                    | struct test                                   |
| {   |   |
| Ell F *fn – stdout:                           | int k:  |
| stderr = fo:                                  | char c  |
| forintf(stdorr "%s" "bollo"):                 | 1.  |
|   | 1. Multiple of word size                      |
| )<br>1. Demonds on the standard               | 1. Multiple of word size                      |
| 1. Depends on the standard                    | 2. Integer size+character size                |
| 2. hello                                      | 3. Depends on the platform                    |
| 3. Undefined benaviour                        | 4. Multiple of integer size                   |
| 4. Compilation error                          |   |
| What is the output of the following code      | What is the size of float in 32 bit compiler. |
| int n=0, m;                                   | 1. 1  |
| for (m=1; m<=n+1; m++)                        | 2. 4  |
| printf("%d", m);                              | 3. 8  |
| 1.1   | 4. 16   |
| 2.6   |   |
| 3. 2  |   |
| 4.0   |   |
| What will be the output of the following      | Which is valid C expression?                  |
| statements ?                                  | 1. int 4my_num = 100000;                      |
|   | 2. int \$my_num = 10000;                      |
| long int a = scanf("%ld%ld",&a,&a);           | 3. int my_num = 100000;                       |
| printf("%ld",a);                              | 4. int my num = 1000;                         |
| 1.0   |   |
| 2.2   |   |
| 3. garbage value                              |   |
| 4. error                                      |   |
| Each C preprocessor directive begins with     | The lifetimeofa variable is                   |
| 1. include                                    | 1.logitivity                                  |
| 2. #  | 2 hinding time                                |
| 3 {   | 3.scone                                       |
| 4 main()                                      | 4 invoking                                    |
|   | Which header file should be included to use   |
| Variables inside parenthesis of functions     | functions like malloc() and calloc()?         |
| declarations have lovel accoss                | 1 string b                                    |
| 1 Universal                                   | 2 stalib b                                    |
| 2. Clabal                                     |   |
|   | 5. IIIeIII0IY.II                              |
|   | 4. uus.n                                      |
| 4. LOCAI                                      |   |
|   |   |



Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

## Test-XI

| In the DBMS like Oracle which of the following | is used to determine whether of a                |
|--|--|
| allow NILLI Values                             | table contains duplicate rows                    |
|  | 1 Like Predicate                                 |
| 1 Unique Kovs                                  | 2 NULL Prodicato                                 |
| 2. Drimory Kous                                | 2.In Dradicate                                   |
| 2. Poth Unique and Drimony Keye                | 3.III Predicate                                  |
| 3. Both Unique and Primary Keys                | 4. Unique Predicate                              |
| 4.None   |  |
|  |  |
| A Attribute in a relation is a foreign key if  | Which of the following is eligible to become     |
| the key from one relation is used as an        | Primary Koy                                      |
| thekey from one relation is used as an         | Primdry Key.                                     |
| attribute in that relation.                    | 1.Name   |
| 1.Super  | 2.Street   |
| 2.Candidate                                    | 3.Department                                     |
| 3.Primary                                      | 4.ID   |
| 4.Sub  |  |
| The advantage of computerized database over    | Which of the following are the properties of     |
| manual is :                                    | entities?  |
| 1. We can put information quick                | 1.Groups   |
| <ol><li>We can get information quick</li></ol> | 2.Tables   |
| 3. Solve the repeated information and          | 3.Switchoards                                    |
| consistency problem                            | 4.Attributes.                                    |
| 4. All of the above                            |  |
| Which of the following method lets you filter  | The full form of DDL is?                         |
| the records that match the selected field?     | 1.Data Definition Language.                      |
| 1.Filter by form                               | 2. Dynamic Definition Language.                  |
| 2.Auto Filter                                  | 3.Detailed Data Language                         |
| 3.Advanced Filter                              | 4.None   |
| 4.Filter by Selection                          |  |
| Which of the following is/are the DDL          | The candidate key is that you choose to identify |
| statements?                                    | each row uniquely is called                      |
| 1.Drop   | 1.Alternate key.                                 |
| 2.Alter  | 2.Foreign Key.                                   |
| 3. Create                                      | 3.Primary Key.                                   |
| 4.All  | 4,None   |
| Which if the following cannot be taken as      | Which of the subset of SQL commands used to      |
| Primary Key?                                   | manipulate Oracle                                |
| 1.Register number                              | DatabaseStructures, including tables?            |
| 2.Dept_ld                                      | 1.Data Definition Language                       |
| 3.Id   | 2.Data Manipulation Language                     |
| 4.Street                                       | 3.Data Retrival Language                         |

|   | 4.Data Described Language                     |
|---|---|
| is the process of organizing data               | To pass on grant privileges to other user the |
| into related tables?                            | clause is used.                               |
| 1. Generalizations                              | 1.insert option                               |
| 2. Specilazations                               | 2.grant option                                |
| 3. Normalization                                | 3.create option                               |
| 4. Allof the above                              | 4.select option                               |
|   |   |
| Consider the attributes ID,City,Name which of   | When SQL statements are embedded inside3GL    |
| the following can be considered to be super key | ,we call such a program as                    |
| 1. City,id                                      | 1. Distinct query                             |
| 2. Name   | 2. Nested query                               |
| 3. Id   | 3. Nested query                               |
| 4. City   | 4. Embedded SQL                               |
| DCL stands for?                                 | To eliminate duplicate rowsis used?           |
|   | 1.Noduplicate                                 |
| 1.Data Console Language                         | 2.Eliminate                                   |
| 2.Data Control Language                         | 3.Distinct                                    |
| 3.Data Console Level                            | 4.None  |
| 4. Data Control Level                           |   |
| Which of the following terms refer to the       | Centralizing the integrity directly under the |
| correctness and completeness of the data in a   | DBMSDuplication and ensures the               |
| database?                                       | consistency and validity of the database.     |
| 1.Data Constraint                               | 1.Increases                                   |
| 2.Data Security                                 | 2.Reduces                                     |
| 3.Data Integrity                                | 3.Does not reduce                             |
| 4.Data Independence                             | 4.Skips                                       |



Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

**Test-XII** 

| Which module gives control of the CPU to the    | Aset of wires and a rigidly defined              |
|---|--|
| process selected by the short-term scheduler?   | protocol that specifies a set of messages that   |
| 1. dispatcher                                   | can be sent on the wires.                        |
| 2. scheduler                                    | 1.port   |
| 3. interrupt                                    | 2.node   |
| 4. none of the mentioned                        | 3.bus  |
|   | 4.None   |
| Theregister is read by the host to gt           | Which of the following resources must be         |
| input.  | protected by operating system?                   |
| 1.flow out                                      | 1.I/O  |
| 2.data out                                      | 2.CPU  |
| 3.flow in                                       | 3.Memory   |
| 4.data in                                       | 4.All of the above                               |
| An operating system is a group of programs      | If one or more devices use a common set of       |
| that  | wires to communicate with the computer           |
| 1. Maintain the relationship in Database        | system ,the connection is called                 |
| 2.Helps in checking the spelling of the word.   | 1.Monitor  |
| 3. Manages the resources of the computer        | 2.Wirefull                                       |
| 4.None  | 3.Bus  |
|   | 4.CPU  |
| Which of the following operating system reads   | Whish of the following is major activities of an |
| and reacts in actual time?                      | operating system in regard to secondary-         |
| 1.Real Time System                              | storage management?                              |
| 2. Quick Operating System                       | 1.Storage allocation                             |
| 3.Batch Operating System                        | 2.Disk Schedulling                               |
| 4.Time Sharing System                           | 3.FreeSpacemanagement                            |
|   | 4.All of these                                   |
| Which of the following can be used as a         | Which of the following is a visual (mathematical |
| criterion for classification of data structures | ) way to determine the deadlock occurrence?      |
| used in language processing?                    | 1. Resource allocation graph                     |
| 1.purpose of a data structure                   | 2. Starvation graph                              |
| 2. Lifetime of a structure                      | 3. Invasion graph                                |
| 3.nature of data structure                      | 4. None of the mentioned                         |
| 4.all of these                                  |  |
|   |  |
| In which of the operating system ,the response  | What is the meaning of"Hibernate"in              |
| time is crucial?                                | WindowsXP/Windows 7?                             |
| 1.Unix Operating System                         | 1.Restart the computers in safe mode.            |

| 2.Batch Operating System                        | 2.Shoutdownthe computer terminating all the     |
|---|---|
| 3.Real Time Operating System                    | running applications.                           |
| 4.Network Operating System                      | 3.Restart the computer in hibernate mode.       |
|   | 4.Shutdown the computer without closing the     |
|   | running applications.                           |
| The scheduling in which CPU is allocated to the | When a device A has a cable that plugs into     |
| process with least CPU Burst time is called     | device B, and device B has a cable that plugs   |
| 1.Multi-level Scheduling                        | into device C and device C plugs into a port on |
| 2.Priority Scheduling                           | the computer ,this arrangement is called        |
| 3.Round Robin Scheduling                        | 1.bus   |
| 4.Shortest Job First Scheduling                 | 2.port  |
|   | 3.cable.  |
|   | 4. Daisy chain                                  |
| What should be the first step while OS          | Which OS doesn't support long file names?       |
| upgrading?                                      | 1.Windows                                       |
| 1.Delete old Operating System                   | 2.Android                                       |
| 2.Backup Critical Data                          | 3.MS DOS  |
| 3.Format Hard Disks                             | 4.OS/2  |
| 4.Backup old Operating System                   |   |
| Theregister is written by the host to           | When a computer is first turned on or restarted |
| send output.                                    | ,a special type of absolute loader called       |
| 1.data out                                      | is executed                                     |
| 2.data in                                       | 1.Relating loader                               |
| 3.control                                       | 2.Bootstrap loader                              |
| 4.status  | 3.Boot loader                                   |
|   | 4. Compile and Go ladder                        |
| The interval from the time of submission of a   | Program pre-emption is :                        |
| process to the time of completion is termed as: | 1.a program terminating itself due to detection |
| 1.waiting time                                  | of an error.                                    |
| 2.throughput                                    | 2.release of CPU by the program after           |
| 3.turnaround time                               | completing its rask.                            |
| 4.response time                                 | 3.forced allotment of CPU by a program to       |
|   | itself.   |
|   | 4.forced de allocation of the CPU from a        |
|   | program which is executing on the CPU.          |



### Test-13

| Consider the following C function.        | Consider the following C program.              |
|---|--|
| <pre>int fun(int n) {</pre>               | # include                                      |
| int $x=1, k;$                             | int main( )                                    |
| for $(k=1; k \le n; ++k)$                 | {  |
| x = x + fun(k) * fun                      | static int a[] = {10, 20, 30, 40, 50};         |
| return x;                                 | static int *p[] = {a, a+3, a+4, a+1, a+2};     |
| }   | int **ptr = p;                                 |
| The return value of fun (5)               | ptr++;   |
| is  | printf("%d%d",                                 |
|   | }  |
| 1. 51                                     |  |
| 2. 41                                     | The output of the program is.                  |
| 3. 31                                     | 1.240  |
| 4. None                                   | 2. 140   |
|   | 3.100  |
|   | 4.None of above                                |
| Consider the following directed graph:    | Let Q denote a queue containing sixteen        |
| $(b) \rightarrow (c)$                     | numbers and S be an empty stack. Head(Q)       |
|   | returns the element at the head of the queue   |
| <i>ଇ</i> ଁ ଚ                              | Q without removing it from Q. Similarly Top(S) |
| ų p                                       | returns the element at the top of S without    |
|   | removing it from S. Consider the algorithm     |
| (d) -> (e)                                | given below.                                   |
| The number of different topological       | while Q is not Empty do                        |
| orderings of the vertices of the graph is | if S is Empty OR Top(S) ≤ Head(Q               |
| ·   | x := Dequeue(Q);                               |
| 1. 5                                      | Push(S, x);                                    |
| 2. 4                                      | else   |
| 3. 6                                      | x := Pop(S);                                   |
| 4. 0                                      | Enqueue(Q, x);                                 |
|   | end  |
|   | end  |
|   | The maximum possible number of iterations of   |
|   | the while loop in the algorithm is             |

|   | 1 64   |
|---|--|
|   | 2 32   |
|   | 2.16   |
|   | 4.256  |
| Find the subscription of the              |  |
| Find the average number of key            | Find the average number of key comparisons   |
| comparisons required for an               | required for an unsuccessful search of a     |
| unsuccessful search of a random binary    | random binary search tree with 14 nodes and  |
| search tree with 14 nodes and 50 as       | 50 as external path length.                  |
| external path length.                     |  |
|   | The equivalent prefix expression for the     |
| 1.4.4                                     | following infix expression (A+B)-(C+D*E)/F*G |
| 2.3.3                                     | is   |
| 3.5.5                                     |  |
| 4.6.6                                     | 1. A-+AB*/+C*DEFG                            |
|   | 2. B/-+AB*+C*DEFG                            |
|   | $3 C - / + AB^* + CDE^*EG$                   |
|   | 4  D + AB*/+CDF*FG                           |
|   | 4. 0 110 / 100 10                            |
|   |  |
| Consider a lower triangular matrix        | Consider the following program               |
| When this lower triangular matrix is      | int find (int n)                             |
| stored in array format than only the      | r (inch)                                     |
| stored in array format then only the      | 1  |
| elements a[i][j] with i 🧲 j are stored in | $\inf_{x \in [0, \infty]} g_{ab}(x) = 1;$    |
| array i.e only the elements present in    | for $(1 = 1; 1 < = n; 1++)$                  |
| lower triangular matrix are stored.       | for (j=1; j < = i; j++)                      |
| Hence less size is consumed to store the  | for (k = 1; k < = j; k++)                    |
| array. Consider a lower triangular matrix | gate = gate +1;                              |
| as [25100, 25100] with base               | return gate;                                 |
| address as 1000 and size of each          | }  |
| element in matrix is 10. If the array is  | What is the value returned by find (10)?     |
| stored in column major order then find    |  |
| the address of the element a[90][45]      | 1.442  |
| stored in array                           | 2.110  |
| stored in array                           | 3.221  |
| 4 45240                                   | 4 000  |
| 1.15210                                   | 4.000  |
| 2.26224                                   | 4.000  |
| 2.26321                                   | 4.000  |
| 2.26321<br>3.0410-1                       | 4.000  |



# ReferenceLink for Data Structure is : <u>https://gradeup.co/barc-2020-data-structures-and-programming-nuclear-quiz-2-i-5eb70920-524b-11ea-a86e-c938330b60b9</u>

### Computer Networking:

| 1. Consider the following statement about  | 2. Let the size of congestion window of a                            |
|--|--|
| various protocols.                         | TCP connection be 32 KB when a timeout                               |
| (a) Address resolution protocol is used to | occurs. The round trip time of the                                   |
| get the MAC address when you have their IP | segment size used is 2 KB. The time taken                            |
| address.                                   | ( <b>in m sec</b> ) by the TCP connection to get                     |
|  | back to 32 KB congestion window is                                   |
| (b) Dynamic host configuration protocol is | ·  |
| Network layer protocol.                    |  |
| (c) Dynamic host configuration protocol ic | 1.1111   |
| used to assign the IP address to the host  | 2.1100   |
|  | A 2222   |
| (d) Reverse address resolution protocol is |  |
| used to get the MAC address when you have  |  |
| IP address.                                |  |
| The number of correct statement is         |  |
|  |  |
| ·  |  |
| 1.2  |  |
| 2.3  |  |
| 3.4  |  |
| 4.All statements are true.                 |  |
| 3.If the UDP header is given as            | 4. Consider the two statement regarding                              |
| Which type of request is made by this UDP  | Statement 1: Data Link Laver attaches                                |
| header?                                    | header as well as trailer to the data                                |
|  | Statement 2: Only Error Correcting Codes                             |
| 1.Client to Server                         | are attached as trailer at the data link layer                       |
| 2.Server to Client                         | Which of the following is true regarding                             |
| 3.Client to Client                         | the above statements?  |
| 4.Invalid Request                          | 1. Charles and 1. States and states and                              |
|  | i. Statement 1 is true and statement                                 |
|  | 2 is the reason being SI the<br>2 Statement 1 is false and Statement |
|  | 2 is the reason being S1 is false.                                   |
|  | 3. Statement 1 is true but S2is not                                  |
|  | correct explanation for statement                                    |
|  | 1.   |
|  | 4. Noneof these.   |

Consider the following plot of TCP window size as a function of time. Assume TCP is operating with slow start , congestion avoidance , fast retransmit and fast recovery mechanism.





1.(23,22)

2.(1,22)

3.(23,17)

4.(1,17)

A link has a transmission speed of  $10^6$  bits/sec. It uses data packets of size 1000 bytes each. Assume that the acknowledgement has negligible transmission delay , and its propagation delay is same as data propagation delay. Also assume that the processing delays at nodes are negligible. The efficiency of stop and wait protocol in this setup is exactly 25%. The value of one way propagation delay (in milliseconds) is \_\_\_\_\_.

Suppose the maximum Sequence no which is possible with Go-Back N, Stop and Wait and Selective repeat protocol is k. What is the size of Senders window for each protocol respectively?

- AK, 1, K+1/2
- BK+1, 1, k+1/2
- CK, 1, K+1
- DK, 1, K/2
- 1. K,1,K+1/2
- 2. K+1,1,K+1/2
- 3. K,1,K+1
- 4. K,1,K/2

Consider the following statements about the application layer protocols.

a. Telnet protocol is used to communicate with a remote device or system.

b. FTP and POP3 are stateless protocol while HTTP is a stateful protocol.

c. FTP is out of band protocol while HTTP is in-band protocol.

d. HTTP uses port number 80 while SMTP uses port number 20.

Which of the following is correct?

1.a and b only 2.b and c only

3.a,b and c only

4. a and c only

Number of keys that are required for secure communication among N persons with symmetric and assymetric key encryption algorithm are?

- 1. N(N-1)/2,2N
- 2. N(N+1)/2,N(N-1)/2
- 3. N^2,3N
- 4. N(N+1)/2,2N

Assume out of many stations sharing common channel only two stations transmit frames. If collision occurs both of them uses back-off algorithm to send their frames. What is the probability that they both successfully send their frames in 3<sup>rd</sup> round. (Any one of them can send their frames first).

1.0.107

2.0.100

3.0.231

4.0.201

Reference Link for : <u>https://gradeup.co/barc-2020-computer-networks-nuclear-quiz-2-i-647cc780-524d-11ea-aa81-a28c04fea3b5</u>



Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

Test-14

#### WIPRO Elite NLTH Coding/ Programming Questions

#### Company purely focuses on Coding and Programming Questions.

#### Attachment is there along with proper solution.

- 1.Addition of two Matrices.
- 2. Program to find the average of n (n < 10) numbers using arrays.
- 3. C program To Implement Linked List
- 4. Operations On Linked List
- 5. Circular Linked List
- 6. Linked List.
- 7. Topological Sort Program In C Language.
- 8. String Processing & Manipulation In C Language.
- 9.Stacks & Queues Program In C Language
- 10. Sorting & Searching Techniques
- 11. Dynamic Programming
- 12. Greedy Algorithm In C Language
- 13. String Matching Program In C Language
- 14. Divide & Conquer Program In C language
- 15. Disjoint sets Program In C Language
- 16. Computational Geometry

17. Program to print BFS traversal from a given source vertex. BFS(int s) traverses vertices reachable from s.

- 18. Breadth First Traversal (starting from vertex 2) ->2031
- 19. Dijkstra's Algorithm
- 20. Prims Algorithm



Test-15

Most asked Wipro coding questions

- 1. Find the distinct elements in a given array.
- 2. Program to sort first half of an array in ascending and second half in descending order.
- 3. Replacing substring in a string
- 4. Balanced parenthesis checker
- 5. Program to find the transpose of a matrix
- 6. Pyramid pattern printing using stars
- 7. Pyramid pattern printing using numbers
- 8. Diamond pattern printing using stars
- 9. Diamond pattern printing using numbers
- 10. Program to sort the array elements based on their frequency
- 11. Program to remove vowels from a string
- 12. Program based on opening and closing gates of a water reservation system
- 13. Program on encrypting the code
- 14. Removing brackets from n algebraic expression
- 15. Arranging flowers in a bouquet
- 16. Program on building the largest house

| 17.  | 18.  |
|--|--|
| Print the below pattern (half diamond using numbers) | Print the following pattern (half diamond using numbers) |
| Input:<br>3 4  | Input :<br>3   |
| Output:  |  |
| 2  | Output:  |
| 5  | 1  |
| 44   | 2*2  |
| 555  | 3*3*3  |

| 6666                         | 3*3*3                            |
|------------------------------|----------------------------------|
| 555                          | 2*2                              |
| 44                           | 1                                |
| 3                            |                                  |
|                              |                                  |
| 19. Print the below pattern. | 20. Print the following pattern. |
|                              |                                  |
| Input:                       | Input:                           |
| 4                            | 3 4                              |
|                              |                                  |
| Output:                      | Output:                          |
| 1                            | 3                                |
| 2*3                          | 44                               |
| 4*5*6                        | 555                              |
| 7*8*9*10                     | 6666                             |
| 7*8*9*10                     | 6666                             |
| 4*5*6                        | 555                              |
| 2*3                          | 44                               |
| 1                            | 3                                |
|                              |                                  |
| 21. Print the below pattern. | 22. Print the below pattern.     |
| Input:                       |                                  |
| 5                            | Input:                           |
| Output:                      | 4                                |
| 1                            |                                  |
| 3*2                          | Output:                          |
| 4*5*6                        | 1*2*3*4*17*18*19*20              |
| 10*9*8*7                     | 5*6*7*14*15*16                   |
| 11*12*13*14*15               |                                  |
|                              |                                  |
|                              |                                  |
| 23. Print the below pattern. |                                  |

| Input:  |  |
|---------|--|
| 3       |  |
|         |  |
| Output: |  |
| 3 3 3   |  |
| 313     |  |
| 3 2 3   |  |
| 3 3 3   |  |
|         |  |



Test-16

Most asked Wipro coding questions

1. Find the distinct elements in a given array.

| G ibm mock test 2020 free - Goog x G wipro technical papers - Google x 🛛 🚰 Wipro Placement Papers & Moo x T 🚰 Wipro Coding Question  | ns for Wij 🗙 🎽 Program to Print All Distinct Ele 🗙 🕇 |                              |
|--|--|------------------------------|
|  | Sign In S  | Sign Up                      |
| C C++ Java Python 3  | 5  |                              |
| <pre>1 #include <stdio.h> 2 3 void distict_elements(int a[], int n);</stdio.h></pre>   | Articles   |                              |
| <pre>4 int main() 5 { 6 int size_array, i, arr[20]; 7 // Get the array size 8 scanf("%d", &amp;size_array); 9 // Get the array elements 10 for(i=0; i<size_array; &arr[i]);="" 11="" 12="" 13="" i++)="" pre="" scanf("%d",="" {="" }<=""></size_array;></pre> |  |                              |
| <pre>14 // Function call to print the distinct elements in an array 15 distict_elements(arr, size_array); 16 return 0; Cutout</pre>  |  |                              |
| Input- Enter the size of the array:5 Enter the array elements:1 2 3 4 4 Output- Input<br>Array:1 2 3 4 4 Distinct Elements:1 2 3 4   |  |                              |
| Wipro-Elite-NLTHpdf Wipro-Elite-NLTHpdf  |  | Show all                     |
| 🚳 🖸 💪 🚎 🕘 💽 💽 📼 🔟  | - N (  | 13:27 في 13:27<br>18-03-2020 |

- 2. Program to sort first half of an array in ascending and second half in descending order.
- 3. Replacing substring in a string

| 🛛 🔓 ibm mock test 2020 free - Goog 🗴 🗍 🌀 wipro technical papers - Google 🗴 T 🌠 Wipro Placement Papers & Mos 🗴 T 🜠 Wipro Coding Questions for Wi   | 🗙 🎽 Program to Replace a Substring 🗙 | +                   |
|---|--------------------------------------|---------------------|
| ← → C ( ▲ faceprep.in/c/program-to-replace-a-substring-in-a-string/   |                                      | ☆ 🖸 💿 :             |
|   | Sign In                              | Sign Up             |
| C C++ Java Python 3   |                                      |                     |
| 1 // C code to replace a substring in a string<br>2<br>2 #includecttic by   | Explore 'C'                          |                     |
| 4 #include <string.h></string.h>  | Articles                             |                     |
| <pre>6 void replaceSubstring(char [],char[],char[]); 7 8 main() 9 { 10 char string[100],sub[100],new_str[100]; 11 printf("\nEnter a string: "); 12 gets(string); 13 printf("\nEnter the substring: "); 14 gets(sub); 15 printf("\nEnter the new substring: "); 16 gets(new_str); </pre> |                                      |                     |
| Output  |                                      |                     |
| Input- Enter the main String:Notwithstanding Enter the string to be replaced:with<br>Enter the replacing string: under Output- Notunderstanding   |                                      |                     |
| Wipro-Elite-NLTHpdf   |                                      | Show all X          |
| 🐵 🔉 💪 🔚 🔵 💽 🛐 🔤 🔤   | - I                                  | all 13:28 13:28 🖌 🗴 |

### 4. Balanced parenthesis checker

| G ibm mock test 2020 free - Goog 🗴 🛛 G wipro technical papers - Google 🗴 🛛 💆 Wipro Placement Papers & Mos 🗴 T 🌠 Wipro Coding Questions for W | 🛛 🗙 🛃 Balanced Parenthesis Checker   🗆 🗙 | + 😐                               |       |   |
|--|--|-----------------------------------|-------|---|
| C a faceprep.in/c/balanced-parenthesis-checker/  |  | ☆ 🖸                               | S     |   |
|  | Sign In                                  | Sign Up                           |       |   |
| C C++ Java Python 3  |  |                                   |       |   |
| 1 // C code to check balanced parenthesis  | Explore 'C'                              |                                   |       |   |
| 3 #include<br>4 #include   | Articles                                 |                                   |       |   |
| <pre>5 char st[20];<br/>6 int top=-1;</pre>  |  |                                   |       |   |
| <pre>7 void psh(char);<br/>8 char pop();<br/>0 int min()</pre>   |  |                                   |       |   |
| 9 Int Hein()<br>18 {<br>11 char a[20].t:   |  |                                   |       |   |
| 12 int i,f=1;<br>13 scanf("%s",a):   |  |                                   |       |   |
| 14 for(i=0;i <strlen(a);i++)< td=""><td></td><td></td><td></td><td></td></strlen(a);i++)<>   |  |                                   |       |   |
| 15 {<br>16 if(a[i]=='('  a[i]=='(') a[i]=='[')<br>   |  |                                   |       |   |
| Output   |  |                                   |       |   |
| Input- ((())) Output- Balanced   |  |                                   |       |   |
|  |  |                                   |       |   |
| Wipro-Eike-NLTHpdf ^ Wipro-Eike-NLTHpdf ^  |  | Sho                               | w all | ĸ |
| 🚯 🖸 🙆 🎦 🚺 💽 🔽 🔤  | - I                                      | <b>≥ 4</b> o 🔐 .ati <sub>12</sub> | 13:28 | ľ |

5. Program to find the transpose of a matrix



6. Pyramid pattern printing using stars

|  | Fueless |  | 21-rela     | 0:      |  |
|--|---------|--|-------------|---------|--|
|  | Explore |  | Sign in     | Sign Up |  |
| 1 // C program to print                                |         |  |             |         |  |
| <pre>2 #include <stdio.h> 3 int main()</stdio.h></pre> |         |  |             |         |  |
| 4 {<br>5 int i int                                     |         |  | Explore 'C' |         |  |
| 6 scanf("%d",&n);                                      |         |  | Articles    |         |  |
| <pre>/ tor(1 = 0; 1 &lt; n; 1++) 8 {</pre>             |         |  |             |         |  |
| <pre>9 for(j = 0; j &lt;= i; j++ 10 {</pre>            |         |  |             |         |  |
| 11 printf("*");  |         |  |             |         |  |
| <pre>12 } 13 printf("\n");</pre>                       |         |  |             |         |  |
| 14 }<br>15 return 0;                                   |         |  |             |         |  |
|  |         |  |             |         |  |
| 16 }   |         |  |             |         |  |
| 16 }   |         |  |             |         |  |
| 16 }<br>Output   |         |  |             |         |  |
| 16 }<br>Output   |         |  |             |         |  |
| 16 }<br>Output<br>\$<br>*                              |         |  |             |         |  |
| 16 }<br>Output<br>5<br>*<br>* *                        |         |  |             |         |  |
| 16 }<br>Output<br>5<br>•<br>•<br>•                     |         |  |             |         |  |

7. Pyramid pattern printing using numbers



|    | *                   |                     |                             |                    |   |
|----|---------------------|---------------------|-----------------------------|--------------------|---|
| J. | Wipro-Elite-NLTHpdf | Wipro-Elite-NLTHpdf |                             | Show all           | × |
| 7  | ) 🖸 🤌 📋             | 1 🜔 🔁 📀 🖭           | <ul> <li>► 🕸 🔩 a</li> </ul> | 13:31<br>18-03-202 |   |

- Diamond pattern printing using numbers
   Follow above logic,replace (\*) with numbers.
- 10. Program to sort the array elements based on their frequency.

//Sort elements by frequency using sorting
#include<bits/stdc++.h>
using namespace std;

```
// struct to sort
struct ele
{
int count, index, val;
};
//sort with the values
bool comp1(struct ele a, struct ele b) {
return (a.val < b.val);</pre>
}
//sort by no of times or order
bool comp2(struct ele a, struct ele b) {
if (a.count != b.count) return (a.count < b.count);</pre>
else return a.index > b.index;
}
void freqSort(int arr[], int n)
{
struct ele element[n];
for (int i = 0; i < n; i++)</pre>
{
    element[i].index = i;
    element[i].count = 0;
    element[i].val = arr[i]; }
/* maintain the same order */
  stable_sort(element, element+n, comp1);
/* initialize count of first element as 1 */
 element[0].count = 1;
/* how many times other elements appear*/
for (int i = 1; i < n; i++)</pre>
{
   if (element[i].val == element[i-1].val)
   {
      element[i].count += element[i-1].count+1;
```

```
/* set previous as -1 to sort again*/
      element[i-1].count = -1;
      /* first index is maintained*/
      element[i].index = element[i-1].index;
   }
   /* if previous element != curr
     count=1 */
   else element[i].count = 1;
}
/* sort with the help of count and order */
  stable_sort(element, element+n, comp2);
for (int i = n-1, index=0; i \ge 0; i-)
   if (element[i].count != -1)
     for (int j=0; j<element[i].count; j++)</pre>
        arr[index++] = element[i].val;
}
// main
int main()
{
int t;
  cin>>t;
for(int j=0;j<t;j++){</pre>
int n;
  cin>> n;
int arr[n];
for (int i=0; i<n; i++)</pre>
   cin>> arr[i];
 freqSort(arr, n);
for (int i=0; i<n; i++)</pre>
   cout << arr[i] << " ";</pre>
}
return 0;
```

## Sort elements by frequency using Hashing

}

```
// Sort elements by frequency using hashing
#include <bits/stdc++.h>
#include
using namespace std;
unordered map<int, int> m2;
bool sort_by_value(const pair<int, int>& a, const pair<int, int>&
b)
{
if (a.second == b.second)
return m2[a.first] < m2[b.first];</pre>
return a.second > b.second;
}
void sort_by_frequency(int a[], int n)
{
unordered_map<int, int> m;
vector<pair<int, int> > v;
for (int i = 0; i < n; ++i) {</pre>
m[a[i]]++;
if (m2[a[i]] == 0)
m2[a[i]] = i + 1;
}
copy(m.begin(), m.end(), back_inserter(v));
sort(v.begin(), v.end(), sort_by_value);
for (int i = 0; i < v.size(); ++i)</pre>
for (int j = 0; j < v[i].second; ++j)</pre>
cout << v[i].first << " ";</pre>
}
int main()
```

```
{
int n;
cout << "\nEnter the number of elements : ";
cin >> n;
int a[n];
cout << "\nInput the array elements : ";
for(int i = 0; i < n; i++)
{
    cin >> a[i];
    }
    sort_by_frequency(a, n);
    return 0;
    }
```

#### 11. Program to remove vowels from a string.

| 🛛 G - ibm mock test 2020 frei: 🗙 🗍 G - wipro technical papers - 🗙 🛛 🌠 Wipro Placement Paper: 🗙 🗖 🦉 Wipro Coding Question: 🗴 | Sort elements by freque: X 🛛 🚰 Remove vowels from a s X | - 0 ×      |
|---|---|------------|
| ← → C ■ faceprep.in/c/remove-vowels-from-string/  |   | ☆ 🗹 S :    |
| FACE Prep Explore   | Sign In   | Sign Up    |
| C C++ Java Python 3   | Explore 'C'   |            |
| <pre>#include <stdio.h> 2 int check_vowel(char); 3 int main()</stdio.h></pre>   | Articles  |            |
| <pre>4 { 5 char s[100], t[100]; 6 int c, d = 0; 7 gets(s); 8 for(c = 0; s[c] != '\0'; c++)</pre>                            |   |            |
| <pre>9 { 10 if(check_vowel(s[c]) == 0) 11 { 12 t[d] = s[c];</pre>   |   |            |
| 13 d+;<br>14 }<br>15 }<br>16 t[d] = '\0';   |   |            |
| Output  |   |            |
| Input- qwertyulop Output- qwrtyp  |   |            |
| Wipro-Elite-NLTHpdf  Wipro-Elite-NLTHpdf  |   | Show all X |
| 🚱 🖸 💪 🔚 🚺 💽 🔄 🔤   | × 🎼   | 14:05 H    |

12. Program based on opening and closing gates of a water reservation system



#### 13. Program on encrypting the code

| G ibm mock test 2020 free - Goog 🗴 🗍 G wipro technical papers - Google 🗙 T 🚰 Wipro Placement Papers & Mos 🗴 T 🎽 Wipro Coding Questions for Wi   | × Z Encrypt the code using two key × | +              |                  | ×   |
|---|--------------------------------------|----------------|------------------|-----|
| C â faceprep.in/c/encrypt-the-code-using-two-key-values/  |                                      | ☆              | 🖸 🛛 🕥            | :   |
|   | Sign In                              | Sign Up        |                  |     |
| <pre>C C++ Java Python 3  # #include<stdio.h> int main()  {     domg int s,n,m,ans;     scanf("XidX'uld Xid",&amp;s,&amp;n, &amp;m);     ans=pow(s,n);     ans=ansXl0;     ans=ansXl0@0000007;     ans=ansXl0@0000007;     printf("Xid",ans);     in return 0;     l     }     l </stdio.h></pre> | Explore 'C'<br>Articles              |                |                  |     |
| Output<br>Input- Enter the values of S, N, M: 2 3 4 Output- Answer:4096   |                                      |                |                  |     |
| Wipro-Elite-NLTHpdf  Wipro-Elite-NLTHpdf  |                                      |                | Show all         | ×   |
| 🚳 🖸 💪 📜 🕘 💽 🔤 🖳   | • •                                  | 8 <b>(</b> ) 🕅 | 14:07<br>18-03-2 | 020 |

14. Removing brackets from n algebraic expression

| 🔓 ibm mock test 2020 free 🗴 🔓 wipro technical papers - 🗴 🌠 Wipro Placement Papers 🗴 💆 Wipro Coding Questions 🗴 | Encrypt the code using to x 🛛 🜠 Remove brackets from a 🗴 🛨 | - 0 <b>- X</b> |
|--|--|----------------|
| ← → C 🔒 faceprep.in/c/remove-brackets-from-an-algebraic-string-expression/                                     |  | ☆ 🖸 🚺 🕄 🗄      |
|  | Sign In S  | ign Up         |
| C C++ Java Python 3  |  |                |
| 1 // Program to remove brackets from an algebraic string $2$   | Explore 'C'  |                |
| <pre>3 #include 4 int main()</pre>   | Articles   |                |
| 5 {<br>6 int i=0,c=0,j=0;<br>7 char a[100],b[100];   |  |                |
| <pre>8 9 printf("\nEnter the string : "); </pre>   |  |                |
| 10 scant("%s",a);<br>11 while(a[i]!*\0')<br>12 {   |  |                |
| 13 if((a[i]=='(') && (a[i-1]=='-'))<br>14 {  |  |                |
| 15 (c==0)?j=1:j=c;<br>16 while(a[i]!=²)²)  |  |                |
| Output   |  |                |
| Input- Enter the string:(x+y)-z Output- x+y-z  |  |                |
|  | -  |                |
| Wipro-Elite-NLTHpdf     Wipro-Elite-NLTHpdf  |  | Show all       |
|  | A 🐚 (  | 14:07          |

## 15. Arranging flowers in a bouquet

| G ibm mock test 2020 free - Goog 🗴 🗍 G wipro technical papers - Google 🗙 T 🌠 Wipro Placement Papers & Mos 🗴 T 🚰 Wipro Coding Questions for Wi | × Z Arranging of flower sticks in a b | + -          |                   |
|---|---------------------------------------|--------------|-------------------|
| $\leftarrow$ $\rightarrow$ C $($ a faceprep.in/c/arranging-of-flower-sticks-in-a-bouquet/   |                                       | ☆ 🖸          | S i               |
|   | Sign In                               | Sign Up      |                   |
| C C++ Java Python 3   |                                       |              |                   |
| 1 // Arranging of flower sticks in a boquet - C code  | Explore 'C'                           |              |                   |
| <pre>2 #include 4 void arrange(int n, int k, int arr[])</pre>   | Articles                              |              |                   |
| <pre>5 { 6 int i,j; 7 for(1=0;i<n;i++) 10="" 8="" 9="" <="" for(j="i+1;j&lt;n;j++)" pre="" {=""></n;i++)></pre>                               |                                       |              |                   |
| <pre>11 if(arr[1]&gt;arr[]]) 12 { 13 int temp=arr[i]; 14 arr[1]=arr[]; 15 arr[i]=temp; 16 } - 2</pre>   |                                       |              |                   |
| Output  |                                       |              |                   |
| Input- Enter the values of n and k 8 4 Output- Enter all the elements: 3 4 6 7 2 9 8 1 12349876   |                                       |              |                   |
| Wipro-Elite-NLTHpdf   |                                       | Shov         | ı all 🗙           |
| 🚳 🖸 🙆 📳 🕘 💽 💽 🖭   | • !                                   | 🗴 🍫 🔐 .ul 18 | 14:08<br>-03-2020 |

16. Program on building the largest house

| typedef struct BoundedArray |  |
|-----------------------------|--|
| {                           |  |
| int size;                   |  |
| int *arr;                   |  |

```
}boundedarray;
#include
struct barr
{
int hnum;
int hpos;
};
void find_land(int n, struct barr hse[])
{
int max, ind_s, ind_end, i;
if(hse[0].hpos>hse[1].hpos)
{ max=hse[0].hpos-hse[1].hpos;
ind_s=0;
ind_end=1;
}
else
{
max=hse[1].hpos-hse[0].hpos;
ind_s=0;
ind_end=1;
}
for(i=1;i<n-1;i++)</pre>
{
if(hse[i].hpos>hse[i+1].hpos)
{
if(max<=(hse[i].hpos-hse[i+1].hpos))</pre>
{
max=hse[i].hpos-hse[i+1].hpos;
ind_s=i;
ind_end=i+1;
}
}
```

```
else
{
if(max<=(hse[i+1].hpos-hse[i].hpos))</pre>
{
max=hse[i+1].hpos-hse[i].hpos;
ind_s=i;
ind_end=i+1;
}
}
}
if(hse[ind_s].hnum<hse[ind_end].hnum)</pre>
printf("%d %d",hse[ind_s].hnum,hse[ind_end].hnum);
else
printf("%d %d",hse[ind_end].hnum,hse[ind_s].hnum);
}
int main() {
int n,k,i;
scanf("%d",&n);
struct barr hse[n];
for(i=0;i<n;i++)</pre>
scanf("%d %d",&hse[i].hnum,&hse[i].hpos);
find_land(n,hse);
}
```

Code Links : <u>https://www.faceprep.in/wipro/wipro-coding-questions/</u>

| 17.  | 18.  |
|--|--|
| Print the below pattern (half diamond using numbers) | Print the following pattern (half diamond using numbers) |

```
Input:
   34
                                      Input :
                                      3
Output:
   3
                                     Output:
   44
                                      1
                                      2*2
   555
   6666
                                      3*3*3
                                     3*3*3
   555
                                      2*2
   44
   3
                                      1
#include
                                       #include
                                       int main()
 int main()
 {
                                       {
                                         int i,j,k,N,count=0;
   int i,j,s,N,count=0;
   scanf("%d%d",&s,&N);
                                         scanf("%d",&N);
   for(i=s;count<4;count++)</pre>
                                         for(i=1;i<=N;i++)</pre>
   {
                                         {
     for(j=0;j<count+1;j++)</pre>
                                           k=1;
       printf("%d",i);
                                           for(j=0;j<i;j++)</pre>
     printf("\n");
                                           {
                                             printf("%d",i);
     i=i+1;
                                             if(k<i)
   }
   for(i=s+N-2;count>0;count-)
                                             {
   {
                                                printf("*");
     for(j=0;j<count-1;j++)</pre>
                                                k=k+1;
       printf("%d",i);
                                             }
     printf("\n");
                                           }
                                           printf("\n");
     i=i-1;
   }
                                         }
   return 0;
                                         for(i=N;i>0;i-)
```

| }  | {  |
|--|--|
|  | k=1;   |
|  | for(j=0;j <i;j++)< td=""></i;j++)<>  |
|  | {  |
|  | <pre>printf("%d",i);</pre>   |
|  | if(k <i)< td=""></i)<>   |
|  | {  |
|  | <pre>printf("*");</pre>  |
|  | k=k+1;   |
|  | }  |
|  | }  |
|  | <pre>printf("\n");</pre>   |
|  | }  |
|  | return 0;  |
|  | }  |
|  |  |
|  |  |
| 19. Print the below pattern.   | 20 Print the following nattern.  |
| ·  | 20. This the following patterni  |
| Input:   | Input:   |
| Input:   | Input:<br>3 4  |
| Input:<br>4<br>Output:   | Input:<br>3 4<br>Output:   |
| Input:<br>4<br>Output:<br>1  | Input:<br>3 4<br>Output:<br>3  |
| Input:<br>4<br>Output:<br>1<br>2*3   | Input:         3 4         Output:         3         44  |
| Input:<br>4<br>Output:<br>1<br>2*3<br>4*5*6  | Input:         3 4         Output:         3         44         555  |
| Input:<br>4<br>Output:<br>1<br>2*3<br>4*5*6<br>7*8*9*10  | Input:         3 4         Output:         3         44         555         6666   |
| Input:         4         Output:         1         2*3         4*5*6         7*8*9*10         7*8*9*10               | Input:         3 4         Output:         3         44         555         6666         6666  |
| Input:         4         Output:         1         2*3         4*5*6         7*8*9*10         7*8*9*10         4*5*6 | Input:         3 4         Output:         3         44         555         6666         6666         555  |
| Input:         4         Output:         1         2*3         4*5*6         7*8*9*10         4*5*6         2*3      | Input:         3 4         Output:         3         44         555         6666         6555         44         44         555         44         555         6666         44         54         555         6666         54         555         55         555         55         54 |
| Input:<br>4<br>Output:<br>1<br>2*3<br>4*5*6<br>7*8*9*10<br>7*8*9*10<br>4*5*6<br>2*3<br>1                             | Input:         3 4         Output:         3         44         555         6666         555         44         3         44         3         44         555         6666         3   |
| Input:<br>4<br>Output:<br>1<br>2*3<br>4*5*6<br>7*8*9*10<br>7*8*9*10<br>4*5*6<br>2*3<br>1<br>1                        | Input:         3 4         Output:         3         44         555         6666         6666         555         44         3         #include <stdio.h></stdio.h>  |

```
int i,j,count=1,n;
  printf("Enter a number\n");
  scanf("%d",&n);
  for(i=1;i<=n;i++)</pre>
  {
                                        {
 for(j=1;j<=i;j++)</pre>
     {
       if(j<i)
       printf("%d*",count++);
                                          i=i+1;
       else
                                        }
       printf("%d",count++);
     }
               printf("\n");
                                        {
    }
 count=count-n;
  for(i=n;i>=1;i-)
   {
        for(j=1;j<=i;j++)
                                          i=i-1;
     {
                                        }
       if(j<i)
                                        return 0;
       printf("%d*",count++);
       else
       printf("%d",count++);
     }
     count=(count+1)-2*i;
     printf("\n");
    }
   return 0;
  }
21. Print the below pattern.
                                    22. Print the below pattern.
Input:
```

```
int i,j,s,N,count=0;
 scanf("%d%d",&s,&N);
for(i=s;count<4;count++)</pre>
   for(j=0;j<count+1;j++)</pre>
     printf("%d",i);
   printf("\n");
for(i=s+N-2;count>0;count-)
   for(j=0;j<count-1;j++)</pre>
     printf("%d",i);
   printf("\n");
```

```
5
                                  Input:
Output:
                                  4
1
3*2
                                  Output:
4*5*6
                                  1*2*3*4*17*18*19*20
10*9*8*7
                                  --5*6*7*14*15*16
11*12*13*14*15
                                  -----10*11
#include<stdio.h>
int main()
 {
                                   #include<stdio.h>
   int i,j,k,l=1,N,d,r,count=0
                                   void pattern(int);
 ;
                                   int main()
  scanf("%d",&N);
                                   {
  for(i=1;i<=N;i++)</pre>
                                           int n;
   {
                                           scanf("%d", &n);
    k=1;
                                           pattern(n);
    d=i%2;
                                           return 0;
    r=l+i-1;
                                   }
    for(j=0;j<i;j++)</pre>
                                   void pattern(int n)
     {
                                   {
  if(d==0)
                                          int i, j, k, s, a = 1,b
                                   = n*n + 1;
       {
         printf("%d",r);
                                         for (i = n; i >= 1; i-)
                                   {
         r-;
                                                  for (s = 0; s <
         if(k<i)
                                   n - i; s++)
         {
                                                          printf("-
                                   ");
           printf("*");
                                                   for (j = 0; j <
          k=k+1;
                                   i; j++)
         }
                                                          printf("%
                                   d*", a++);
         1++;
         continue;
                                                  for (k = 0; k <
                                   i - 1; k++)
       }
```

| <pre>printf("%d",1);</pre>                              | printf("%                |
|---|--------------------------|
|   | d*", b++);               |
| 1++;  | printf("%d\n", h         |
| if(k <i)< th=""><th>); // last b should with</th></i)<> | ); // last b should with |
| {   | out *                    |
| <pre>printf("*");</pre>                                 | b -= 2*(i - 1);          |
| k=k+1;  | }                        |
| }   | }                        |
| }   |                          |
| <pre>printf("\n");</pre>                                |                          |
| }   |                          |
| return 0;   |                          |
| }   |                          |
|   |                          |
|   |                          |
| 23. Print the below pattern.                            |                          |
|   |                          |
| Input:  |                          |
| 2   |                          |
| 5   |                          |
| Output:   |                          |
|   |                          |
| 3 3 3   |                          |
| 313   |                          |
| 3 2 3   |                          |
| 3 3 3   |                          |
|   |                          |
| <pre>#include<stdio.h></stdio.h></pre>                  |                          |
| <pre>int main()</pre>                                   |                          |
| {   |                          |
| int i, j, n, c=1;                                       |                          |
| scanf("%d", &n);  |                          |
| for(i=1; i<=n+1; i++)                                   |                          |
| {   |                          |
| for(j=1; j<=n; j++)                                     |                          |
|   |                          |

```
{
    if(i!=1 && j==n-1)
    {
        printf("%d ", c);
            c++;
     }
        else
        printf("%d ", n);
        }
        printf("\n");
        }
        return 0;
}
```