

Class: XII : Computer science

Topic: Class&Object, Constructor & destructor, C++ revision tour

Find the output of the following programs:

<pre>(1) #include <iostream.h> struct GAME { int Score, Bonus;}; void Play(GAME &g, int N=10) { g.Score++;g.Bonus+=N; } void main() { GAME G={110,50}; Play(G,10); cout<<G.Score<<": "<<G.Bonus<<endl; Play(G); cout<<G.Score<<": "<<G.Bonus<<endl; Play(G,15); cout<<G.Score<<": "<<G.Bonus<<endl; }</pre>	<pre>(2) #include <iostream.h> void Secret(char Str[]) { for (int L=0;Str[L]!='\0';L++); for (int C=0;C<L/2;C++) if (Str[C]=='A' Str[C]=='E') Str[C]='#'; else { char Temp=Str[C]; Str[C]=Str[L-C-1]; Str[L-C-1]=Temp; } } void main() { char Message[]="ArabSagar"; Secret(Message); cout<<Message<<endl; }</pre>
(3) In the following program, if the value of Guess entered by the user is 65, what will be the expected output(s) from the following options (i), (ii), (iii) and (iv)? 2 <pre>#include <iostream.h> #include <stdlib.h> void main() { int Guess;</pre>	<pre>(4) void swap(char &c1,char &c2) { char temp; temp=c1; c1=c2; c2=temp; } void update(char *str) { int k,j,l1,l2; l1 = (strlen(str)+1)/2; l2=strlen(str);</pre>

<pre> randomize(); cin>>Guess; for (int l=1;l<=4;l++) { New=Guess+random(l); cout<<(char)New; } } (i) ABBC (ii) ACBA (iii) BCDA (iv) CABD7 </pre>	<pre> for(k=0,j=l1-1;k<j;k++,j--) { if(islower(str[k])) swap(str[k],str[j]); } for(k=l1,j=l2-1;k<j;k++,j--) { if(isupper(str[k])) swap(str[k],str[j]); } } void main() { chardata[100]={"gOoDLUck"}; cout<<"OriginalData"<<data<<endl; update(data); cout<<"UpdatedData"<<data; } </pre>
<pre> (5) void main () { int *Queen, Moves [] = {11, 22, 33, 44}; Queen = Moves; Moves [2] + = 22; Cout<< "Queen @"<<*Queen<<endl; *Queen - = 11; Queen + = 2; cout<< "Now @"<<*Queen<<endl; Queen++; cout<< "Finally@"<<*Queen<<endl; cout<< "New Origin @"<<Moves[0]<<endl; </pre>	<pre> (6) void SwitchOver(int A [], int N, int Split) { for (int K=0 ; K<N; K++) if (K<Split) A[K]+ =K; else A [K]*=K; } void Display (int A [], int N) { for (int K=0 ; K<N ; K++) (K%2==0)? cout<<A[K]<<"%":cout<<A[K]<<en dl; </pre>

<pre> } </pre>	<pre> } void main () {int H[]= {30,40,50,20,10,5}; SwitchOver (H, 6, 3); Display (H, 6); } </pre>
(7) Go through the C++ code shown below, and find out the possible output or outputs from the suggested Output Options (i) to (iv). Also, write the minimum and maximum values, which can be assigned to the variable MyNum. <pre> #include #include void main () { randomize () ; int MyNum, Max=5; MyNum = 20 + random (Max) ; for (int N=MyNum; N<=25;N++) cout<<N<<"*"; } </pre> (i) 20*21*22*23*24*25 (ii) 22*23*24*25* (iii) 23*24* (iv) 21*22*23*24*25	<pre> (8) int A[][4] = {{11,21,32,43}, {20,30,40,50}}; for (int i = 1; i<2; i++) for (int j = 0; j<4; j++) cout<<A[i][j]<<"*\n"; (9) int a = 5; void demo(int x, int y, int &z) { a += x+y; z = a+y; y += x; cout<<x<<'* '<<y<<'* '<<z<<endl; } void main() { int a = 3, b = 4; demo(::a,a,b); demo(::a,a,b); } </pre>
<pre> : (10) #include<iostream.h> int g=20; void Func(int &x, int y) { </pre>	<pre> (11) #include void main() { char a[2]={"Amit","Sumit"}; for(int i=0;i<2;i++) </pre>

<pre> x=x-y; y=x*10; cout<<x<<','<<y<<"\n"; } void main() { int g=7; Func(g,::g); cout<<g<<','<<::g<<'\n'; Func(::g,g); cout<<g<<','<<::g<<'\n'; } </pre>	<pre> { int l=strlen(a[i]); for(int j=0;j<2;j++) cout<<a[i]<<" : "; } } </pre>
(12) #include <pre> class student { public: student() { cout<<"\n Computer Science"; } ~student() { cout<<" subject"; } }st; void main() { cout<<" is my best" } </pre>	(13) In the following C++ program , what will the maximum and minimum value of r generated with the help of random function. <pre> #include voidmain() { int r; randomize(); r=random(20)+random(2); cout<<r; } </pre>
(14) <pre> int A[][3] ={{1,2,3}, {5,6,7}}; for (int i = 1; i<2; i++) </pre>	(15) <pre> int a = 3; void demo(int x,int y,int &z) { a += x+y; </pre>

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for (int j = 0; j<3; j++)  
    cout<<A[i][j]<<"*\n";
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        z = a+y;  
        y += x;  
        cout<<x<<'<'<<y<<'<'<<z<<endl;  
    }  
    void main()
```

```
  
    { int a = 2, b = 5;  
      demo(::a,a,b);  
      demo(::a,a,b);  
    }
```