

Holiday Homework Class-XI- Computer Science

What would be printed from the following C++ code segment?

1. for (x=1;x<=5;x++)

```
{  
for(y=1; y<=x; y++)  
    cout<<x<<"\t";  
    cout<<"\n";  
}
```

2.

```
#include <iostream>  
#include <conio>  
int main()  
{  
int N;  
cin >> N;  
int ndigits = 0;  
  
while (N > 9) {  
ndigits = ndigits + 1;  
N = N/10; // extracts one digit  
}  
cout << ndigits + 1 << endl;  
}
```

3.

```
int main()  
{int y=0;  
for(int x=50;x>20;x-=5)  
{switch(x)  
{ case 20:y=y+x;break;  
case 25:y = y +5;break;  
case 30:y = y+10;break;  
case 35:y =y+x;  
case 40:y =y+3;  
x=x-5;break;  
case 45:  
y=y+2;break;  
case 50:x =x-5;  
default:x=x-5;  
} cout<<(x+y)<<endl;  
} return 0; }
```

4.

```
void shift(int a[10],int n)
{
int b[10],i,k=0;
for(i=0;i<n;i++)
{
if(a[i]%2= =1)
{
b[k]=a[i];
k++;
}
}
for(i=0;i<n;i++)
{ if(a[i]%2= =0)
{ b[k]=a[i];
k++;
}
}
for(i=0;i<n;i++)
cout<<b[i]<<" ";
}
```

5. void Encode(char Info[], int N);

```
int main()
{
char Memo[] = "Justnow";
Encode(Memo, 2);
cout << Memo << endl;
}
void Encode(char Info[], int N)
{
for (int I = 0; Info[I] != '\0'; I++)
if (I % 2 == 0)
Info[I] = Info[I] - N;
else if (islower(Info[I]))
Info[I] = toupper(Info[I]);
else
Info[I] = Info[I] + N;
}
```

```

6. void ChangeIt(char Text[], char C)
{
for (int K = 0; Text[K] != '\0'; K++)
{
if (Text[K] >= 'F' && Text[K] <= 'L')
Text[K] = tolower(Text[K]);
else if (Text[K] == 'E' || Text[K] == 'e')
Text[K] = C;
else if (K % 2 == 0)
Text[K] = toupper(Text[K]);
else
Text[K] = Text[K - 1];
}
}

void main()
{
char oldText[] = "pOwERALone";
ChangeIt(oldText, '%');
cout << "New TEXT:" << oldText << endl;
}

```

```

7. #include <iostream.h>
void main()
{ int a[5]= {5,10,15,20,25};
int i, j,k=1,m;
i = ++a[1] ;
j= a[2]++;
m= a[i++];
cout<<i<<j<<k<<m;
}

```

8. Write output for following code:

```

int val,n=1000;
cin>>val;
res=n+val>1500?100:200;
cout<<res;

```

i) If the input is 1000. ii) If the input is 200.

```

9. struct MyBox
{
int Length, Breadth, Height;
};

```

```

void Dimension(MyBox M)
{
    cout << M.Length << "x" << M.Breadth << "x";

    cout << M.Height << endl;
}

void main()
{
    MyBox B1 = {10, 15, 5}, B2, B3;
    ++B1.Height;
    Dimension(B1);
    B3 = B1;
    ++B3.Length;
    B3.Breadth++;
    Dimension(B3);
    B2 = B3;
    B2.Height += 5;
    B2.Length--;
    Dimension(B2);
}

```

```

10. #include <iostream>
    #include <math.h>
    int main()
    { int y=0;
      while(y<=10)
      {
        int x =1;
        do { x++;
          if(y%x==0) cout<<"*";
          if(x%3==2) cout<<"#";
        } while(x<3);
        y+=6;
        cout<<"% ";
      } return 0; }

```