

CS101 – Computer Programming
Quiz for Wednesday Batch – 29 October 2014

Q1. Consider the following program

```
#include<iostream>
using namespace std;
struct student {
    int rollNumber;
    char name[50];
    int year;
    char division;
};
struct marks {
    int rollNumber;
    int marksPhysics;
    int marksChemistry;
    int marksMaths;
};

int main() {
    marks m[10];
    student s[10] = {1,"Goyal",3,'A'};    //Statement 1
    int counter;

    for(counter = 0;counter<9;counter++) {
        s[counter+1] = OP ;    //Statement 2
    }

    for(counter = 0;counter<10;counter++) {
        m[counter].rollNumber = counter;
        m[counter].marksPhysics = counter+10;
        m[counter].marksChemistry = counter+20;
        m[counter].marksMaths = counter+30;
    }

    cout << m[9].rollNumber << ", " << m[9].marksPhysics << ", " <<
        m[9].marksChemistry << ", " << m[9].marksMaths;    //Statement 3

    return 0;
}
```

Choose the correct options

- A) The **statement 1** 'student s[10] = {1,"Goyal",3,'A'};' assigns these values to all elements i.e. from s[0] to s[9]
- B) If **OP** is replaced with **s[counter]**, then the program iteratively assigns values {1,"Goyal",3,'A'} from s[1] to s[9]
- C) The last cout statement, will print "9, 19, 29, 39"
- D) None of these

Refer to Question 2 on the next page

Q2. What is the output of the following program.

```
#include <iostream>
using namespace std;
int main()
{
    int size=5,i,j;
    int * array = new int[size];
    for(i = 0; i < size; i++)
    {
        array[i] = i+2;
        cout << array[i] << " ";
    }
    cout<<endl;
    for(j=0; j<2; j++)
    {
        for(i = 0; i < size; i++)
        {
            array[i] = array[i]*array[i];
            cout << array[i] << " ";
        }
        cout <<endl;
    }
    return 0;
}
```

Select the appropriate choice

- A) 1 2 3 4 5
 2 4 5 8 10
 4 8 10 16 20
- B) 1 2 4 8 10
 2 4 8 16 20
 3 6 12 24 30
- C) 2 3 4 5 6
 4 9 16 25 36
 16 81 256 625 1296
- D) 2 4 16 256
 3 9 81 6562
 4 16 256 65536
- E) None of these