

**CS101 – Computer Programming**  
**Quiz for Thursday Batch – 30 October 2014**

**Q1. Consider the following program that calculates the penalty points based on the account type and the balance.**

```
#include<iostream>
using namespace std;
struct bankCustomer {
    long int account_number;
    char customer_first_name[50];
    double balance;
    char account_type;
};

int main() {
    struct bankCustomer customer = {123,"Amit",4850,'R'};
    int penalty_points = -10;

    if(customer.account_type == 'S') {
        if(customer.balance <= 0) {
            penalty_points = 10;
        }
        else {
            penalty_points = 0;
        }
    }

    if(customer.account_type == 'R') {
        if(customer.balance < 5000) {
            penalty_points = 40;
        }
        else {
            penalty_points = 0;
        }
    }

    if(penalty_points<0)
        cout << "Invalid account" << endl;
    if(penalty_points>0)
        cout << "Penalty is levied on the account" << endl;
    if(penalty_points == 0)
        cout << "Account valid. No penalty levied" << endl;

    return 0;
}
```

**What would be the output produced by the program given above?**

- A) Invalid account
- B) Penalty is levied on the account
- C) Account valid. No penalty levied
- D) None of these

**Q2.** Predict the output of the following program:

```
#include <iostream>
using namespace std;
int main()
{
    int i,j;
    char * array = new char[5];
    char * array1 = new char[5];
    for(i = 0; i < 5; i++)
    {
        array[i] = i+'j';
        cout << array[i] <<" ";
    }
    cout <<endl;
    for(j = 0; j < 3; j++)
    {
        for(i = 5; i > 0; i--)
        {
            array1[i] = i;
            cout << " " ;
        }
        array1[j] = i+107;
        cout << array1[j]<<endl;
    }
}
```

**Select an appropriate choice**

- A)    j k l m n  
          k  
          k  
          k
- B)    j k l m n  
          l  
          l  
          l
- C)    j k l m n  
          k l m n  
          l m n
- D)    j k l m n  
          k l m n  
          l m n
- E)    None of these