Q2

```
#include<iostream>
#include<string>
using namespace std;

class Student
{
 private:
    string name, rollnumber;
     int marks,
public:
    void .getDetails();
    void SetDetails();
};
void Student::SetDetails()
 {
   cout<<"Enter the name:"<<endl;
    cin>>name;
   cout<<"enter roll number:"<<endl;
   cin>>rollnumber;
   cout<<"Enter total marks:"<<endl;
   cin>>marks
}
void Student::getDetails()
  {

   cout<<"Name:"<<name<<", Roll number:"
      <<rollnumber<<", marks:"<<marks
      <<endl;
}
int main(int argc, char const *argv[])
{
   int count;
    cout<<"Enter the count of Students:";
    cin>>count;
```

```
if (count>0)
{
  Student &StudentArray [count];
  for(int i=0; i<count; i++)
  {
    Cout<<"Enter Student"<<i+1<<"Details"<<endl;

    StudentArray[i].setDetails();
  }
  cout<<"\n You have entered :"<<count<<endl;
  for (int i=0; i<count; i++)
  {
    StudentArray[i].getDetails();
  }
}
else
{
  cout<<" Please enter a valid number"<<endl;
}
return 0;
}
```

Q1

```
#include<iostream>
using namespace std;
Class Student
{
  private:
  string USN, Name;
  int count;
  public:
  void read();
  void print();
};
```

```
void Student :: read()
{
    cout << "Enter USN" << endl;
    cin >> USN
    cout << "Enter Name" << endl;
    cin >> Name;
}

void Student :: print()
{
    cout << "USN" << USN << "Name" << Name;
}

int main(int argc, char const *argv[])
{
    int count, cnt;
    if(count > 0)
    {
    Student StudentArray[count];
    for(int i=0; i<count; i++)
        {
            cout << "Enter Student" << i+1 << "::" << endl;
            StudentArray[i].read();
            cnt++;
        }
    for(int i=0; i<count; i++)
        {
            cout << "entered details are" << endl;
            StudentArray[i].print();
            cnt++;
        }
    cout << cnt-1;
}
```

```
}
else
{
    cout << "enter valid number" << endl;
}
```

Q3
```
#include <iostream>
#include <string>
using Namespace std;
class Student
{ private:
    string Name, USN; int phone;
  public:
    read();
    print();
};

Void Student::read();
{
   cout << "Enter name" << endl;
   cin>>name;
   cout << "Enter USN" << endl;
   cin>> USN;
   cout << "phone number" << endl;
   cin>> phone;
}
void student::print();
{
   cout << "Name:" << Name << "USN" << USN <
                          "phone" << phone;
}
```

```
int main (int argc, char const *argv[])
{
    int count;
    cout << "Enter No of student:";
    cin >> count
if(count>0)
    for (count = 0; count <= 10; count++)
    {
Student Student Array [count]
For (int i=0; i< count; i++)
{
    cout << "Enter details:" << endl;
    StudentArray [i]. read();
}
For (int i=0; i< count; i++)
{
    Cout << "details are:" << endl;
    StudentArray [i]. print();
}
}
else
{
    cout << "enter valid numbers";
}
}
```

04

```
import java.util.Scanner;
import java.io.*;
class divisible
{
    public static void main(String[]
                             args)
```

& &

```
int a;
Scanner sc = new Scanner(System.in);
System.out.print("Enter the no");
String str.
a = sc.nextLine();
a = sc.nextInt();
if ((a>4000) && (a<8001))
{
  if (a%17==0)
  {
    System.out(a+" is divisible
                by 17");
  }
else
{
  System.out(a+" is not divisible
              by 17");
}
}
else
{
  System.out("enter no > 4000 & <8001");
}
}
```

05

```
#include <iostream>
#include <string>
class circle
{
  int radius
  void read(int radius)
  {
```

Case 3: c1.read();
c1.print();
break;

}
}

Q5
```
#include<iostream>
#include<string>
using namespace std;
 class circle
{
    public:
    float radius;
    void area(float radius)
      {
        float a;
        a=3.14*radius*radius;
        cout<<"area of circle is"<<a;
      }
};
class rectangle
{
  public:
    float length,breadth;
    void area(float length,float breadth)
    {
      float a;
      a=length*breadth;
      cout<<"area of rectangle is"<<a;
```

```
};
class triangle
{
  public:
  float base, height;
  void area (float base, float height)
  {
    float a;
    a = 0.5 * base * height;
    cout << "area of triangle is" << a;
  }
};
int main (int argc, char const *argv[])
{
  int ch;
    float length, breadth, radius,
          base, height;
  rectangle r1;
  triangle t1;
  circle c1;
cout << "enter your choice" << endl << "
  1.rectangle" << endl << "2.triangle" << "
  << "3.circle" << endl;
  cin >> ch;
  switch (ch)
  {
    case 1: cout << "enter length";
            cin >> length;
            cout << "enter breadth"
            cin >> breadth;
            r1.area (length, breadth)
            break;
```

```
case 2: cout << "Enter base";
        cin >> base;
        cout << "Enter height";
        cin >> height;
        t1.area(base, height);
        break;
case 3: cout << "Enter radius";
        cin >> Radius;
        t1.area(radius);
        break;
    }
}
```