

Q. Java program to find SGPA of students.

```
import java.util.Scanner;
class student {
    Scanner sc = new Scanner(System.in);
    String USN;
    String Name;
    int credits[] = new int[5];
    double marks[] = new double[5];
    int point[] = new int[5];
    float SGPA;
    int total credits = 0;

    void getStudentData() {
        System.out.println("Enter the student USN:");
        USN = sc.nextLine();
        System.out.println("Enter the student Name:");
        Name = sc.nextLine();
        for (int i = 0; i < 5; i++) {
            System.out.println("Enter the credits of the subject " + (i+1) + ":");
            credits[i] = sc.nextInt();
            total credits += credits[i];
            System.out.println("Enter the marks of the subject " + (i+1) + ":");
            marks[i] = sc.nextDouble();
        }
    }
}
```

```
void showStudentData()
{
    System.out.println("Student USN:" + USN);
    System.out.println("Student Name:" + Name);
    for (int i = 0; i < 5; i++)
    {
        System.out.println("subject" + (i + 1) + " credits:"
            + credits[i] + " marks:" + marks[i]);
    }
    System.out.println("SGPA of " + Name + " is " +
        (float) (SGPA / totalCredits));
}
```

```
void calSgpa()
{
    for (int i = 0; i < 5; i++)
    {
        if (marks[i] < 0 || marks[i] > 100)
        {
            System.out.println("marks are invalid");
            return;
        }
        else if (marks[i] >= 90)
        {
            point[i] = 10;
        }
        else if (marks[i] >= 80 && marks[i] < 90)
        {
            point[i] = 9;
        }
    }
}
```

```
else if (marks[i] >= 70 && marks[i] < 80)
{
    point[i] = 8;
}
else if (marks[i] >= 60 && marks[i] < 70)
{
    point[i] = 7;
}
else if (marks[i] >= 50 && marks[i] < 60)
{
    point[i] = 5;
}
else if (marks[i] >= 40 && marks[i] < 50)
{
    point[i] = 4;
}
else {
    point[i] = 0;
}
SGPA += (point[i] * credits[i]);
}
```

```
public class StuMain
{
    public static void main (String[] args)
    {
        student stu1 = new student();
    }
}
```



```
stu1.getStudentData();  
stu1.calGpa();  
stu1.showStudentData();  
}  
}
```