

```
import java.util.*;
class Student2
{
    String USN;
    String name;
    int credits[];
    int marks[];
    int n,tot=0;
    double SGPA;

    Student2()
    {
        SGPA=0;
    }

    void input()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the USN and the name of the student");
        USN=sc.nextLine();
        name=sc.nextLine();
        System.out.println("Enter the number of subjects");
        n=sc.nextInt();
        credits=new int[n];
        marks =new int[n];
        for(int i=0;i<n;i++)
        {
            System.out.println("Enter the credits for subject:"+i+1));
            credits[i]=sc.nextInt();
            tot=tot+credits[i];
        }
        for(int i=0;i<n;i++)
        {
            System.out.println("Enter the marks of the student for subject:"+i+1));
            marks[i]=sc.nextInt();
        }
    }
}
```

```
void grade_points()
{
    int i;
    for(i=0;i<n;i++)
    {
        if(marks[i]>=90 && marks[i]<100)
        {
            marks[i]=10;
        }
        else if(marks[i]>=80 && marks[i]<90)
        {
            marks[i]=9;
        }
        else if(marks[i]>=70 && marks[i]<80)
        {
            marks[i]=8;
        }
        else if(marks[i]>=60 && marks[i]<70)
        {
            marks[i]=7;
        }
        else if(marks[i]>=50 && marks[i]<60)
        {
            marks[i]=6;
        }
        else if(marks[i]>=40 && marks[i]<50)
        {
            marks[i]=4;
        }
        else if(marks[i]<40)
        {
            marks[i]=0;
        }
    }
}
```

```
void calc_SGPA()
{
    int i;
    for(i=0;i<n;i++)
    {
        SGPA=SGPA+(credits[i]*marks[i]);
    }
    SGPA=SGPA/tot;
}
void display()
{
    System.out.println("The student with USN:"+USN+", Name:"+name+" has SGPA:"+SGPA);
}
public static void main(String[] args)
{
    Student2 obj=new Student2();
    obj.input();
    obj.grade_points();
    obj.calc_SGPA();
    obj.display();
}
}
```

C:\Users\vedika\Desktop\javap>java Student2

Enter the USN and the name of the student

1BM19CS181

VEDIKA DALMIA

Enter the number of subjects

5

Enter the credits for subject:1

5

Enter the credits for subject:2

4

Enter the credits for subject:3

4

Enter the credits for subject:4

4

Enter the credits for subject:5

3

Enter the marks of the student for subject:1

69

Enter the marks of the student for subject:2

76

Enter the marks of the student for subject:3

82

Enter the marks of the student for subject:4

80

Enter the marks of the student for subject:5

80

The student with USN:1BM19CS181, Name:VEDIKA DALMIA has SGPA:8.3

C:\Users\vedika\Desktop\javap>