

```

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

    Student()
    {
        this.USN=USN;
        this.name=name;
        this.credits=credits;
        this.marks=makes;
        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(i=0;i<n;i++)
        {
            System.out.println("Enter the credits for subject:"+(i+1));
            credits[i]=sc.nextInt();
            tot=tot+credits[i];
        }
        for(i=0;i<n;i++)
        {
            System.out.println("Enter the marks of the student for subject:"+(i+1));
            this.marks[i]=sc.nextInt();
        }
    }
}

```

```

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

```

```
void calc_SGPA()
{
    int i;
    for(i=0;i<n;i++)
    {
        SGPA=SGPA+(credits[i]*this.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)
{
    Student st=new Student();
    st.input();
    st.grade_points();
    st.calc_SGPA();
    st.display();
}
}
```

```
E:\Java>java Student
```

```
Enter the USN and the name of the student
```

```
1
```

```
Swaroop
```

```
Enter the number of subjects
```

```
2
```

```
Enter the credits for subject:1
```

```
5
```

```
Enter the credits for subject:2
```

```
4
```

```
Enter the marks of the student for subject:1
```

```
98
```

```
Enter the marks of the student for subject:2
```

```
81
```

```
The student with USN:1, Name:Swaroop has SGPA:9.555555
```