

```
import java.util.Scanner;
class Student
{
    private String usn;
    private String name;
    private int credits[]=new int[7];
    private int marks[]=new int[7];
    private int grade[]=new int[7];
    private double sum=0.0;
    private double total=0.0;
    private double sgpa;

    void getDetails()
    {
        System.out.println("Enter the Student details:");
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter Name:");
        name=sc.next();
        System.out.println("Enter USN:");
        usn=sc.next();
        for(int i=0;i<5;i++)
        {
            System.out.println("Enter marks in Subject"+(i+1)+":");
            marks[i]=sc.nextInt();
            System.out.println("Enter the credits for Subject"+(i+1)+":");
            credits[i]=sc.nextInt();
        }
    }
    void calculate()
    {
        for(int i=0;i<5;i++)
        {
            if(marks[i]<=100 && marks[i]>=90)
                grade[i]=10;
            else if(marks[i]>=80 && marks[i]<90)
                grade[i]=9;
            else if(marks[i]>=70 && marks[i]<80)
                grade[i]=8;
            else if(marks[i]>=60 && marks[i]<70)
                grade[i]=7;
            else if(marks[i]>=50 && marks[i]<60)
                grade[i]=6;
            else if(marks[i]>=40 && marks[i]<50)
                grade[i]=5;
            else if(marks[i]>=30 && marks[i]<40)
                grade[i]=4;
            else if(marks[i]>=20 && marks[i]<30)
                grade[i]=3;
            else if(marks[i]>=10 && marks[i]<20)
                grade[i]=2;
            else if(marks[i]>=0 && marks[i]<10)
                grade[i]=1;
        }
        sum=0;
        for(int i=0;i<5;i++)
        {
            sum+=marks[i]*grade[i];
        }
        total=sum;
        sgpa=total/5;
    }
}
```



```
}  
void calculate()  
{  
    for(int i=0;i<5;i++)  
    {  
        if(marks[i]<=100 && marks[i]>=90)  
            grade[i]=10;  
        else if(marks[i]<90 && marks[i]>=80)  
            grade[i]=9;  
        else if(marks[i]<80 && marks[i]>=70)  
            grade[i]=8;  
        else if(marks[i]<70 && marks[i]>=60)  
            grade[i]=7;  
        else if(marks[i]<60 && marks[i]>=45)  
            grade[i]=6;  
        else  
            grade[i]=0;  
    }  
    for(int i=0;i<5;i++)  
    {  
        sum+=(credits[i]*grade[i]);  
        total+=(credits[i]*10);  
        sgpa=((sum)/(total)*10);  
    }  
    System.out.println(sum);  
    System.out.println(total);  
    sgpa=((sum)/(total)*10);  
    System.out.println(sgpa);  
}  
void display()  
{  
    System.out.println("SGPA of "+name+" with USN "+usn+" is:"+sgpa);  
}  
}  
class Main  
{
```



```
        grade[i]=8;
    else if(marks[i]<70 && marks[i]>=60)
        grade[i]=7;
    else if(marks[i]<60 && marks[i]>=45)
        grade[i]=6;
    else
        grade[i]=0;
    }
    for(int i=0;i<5;i++)
    {
        sum+=(credits[i]*grade[i]);
        total+=(credits[i]*10);
        sgpa=((sum)/(total)*10);
    }
    System.out.println(sum);
    System.out.println(total);
    sgpa=((sum)/(total)*10);
    System.out.println(sgpa);
}
void display()
{
    System.out.println("SGPA of "+name+" with USN "+usn+" is:"+sgpa);
}
}
class Main
{
    public static void main(String ss[])
    {
        Student s1=new Student();
        s1.getDetails();
        s1.calculate();
        s1.display();
    }
}
```



Command Prompt

```
Enter Name:
Nikita
Enter USN:
1BM19CS103
Enter marks in Subject1:
90
Enter the credits for Subject1:
4
Enter marks in Subject2:
80
Enter the credits for Subject2:
4
Enter marks in Subject3:
85
Enter the credits for Subject3:
5
Enter marks in Subject4:
90
Enter the credits for Subject4:
3
Enter marks in Subject5:
88
Enter the credits for Subject5:
4
187.0
200.0
9.350000000000001
SGPA of Nikita with USN 1BM19CS103 is:9.350000000000001

C:\Users\Nikita\Desktop\OOJ_LAB>
```



Type here to search

