

```
class student{

String usn;
String name;
float[] credits= new float[30];
float[] marks = new float[30];
float[] grade = new float[30];
Scanner ob = new Scanner(System.in);
void input(int n) {
    for(int i=0;i<n;i++) {
        System.out.println("Enter credit of subject "+(i+1));
        credits[i]=ob.nextFloat();
        System.out.println("Enter marks of subject "+(i+1));
        marks[i]=ob.nextFloat();
        if(marks[i]>=90){grade[i]=10;}
        else if(marks[i]>=80){grade[i]=9;}
        else if(marks[i]>=70){grade[i]=8;}
        else if(marks[i]>=60){grade[i]=7;}
        else if(marks[i]>=50){grade[i]=6;}
        else if(marks[i]>=40){grade[i]=5;}
        else if(marks[i]>=0){grade[i]=0;}
    }
}
void output(float credits[],float grade[],int n) {
    float sum=0,cre=0,sgpa;
    for(int i=0;i<n;i++)
    { sum = sum + (credits[i]*grade[i]);
      cre=cre + credits[i];
    }
    sgpa = sum/cre;
    System.out.println(name+" with usn "+usn+" your sgpa is "+sgpa);
}
}

class studentsgpa{
public static void main(String args[])
{
student s= new student();
int n;
<
```

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studentsgpa - Notepad
File Edit Format View Help
    for(int i=0;i<n;i++) {
        System.out.println("Enter credit of subject "+(i+1));
        credits[i]=ob.nextFloat();
        System.out.println("Enter marks of subject "+(i+1));
        marks[i]=ob.nextFloat();
        if(marks[i]>=90){grade[i]=10;}
        else if(marks[i]>=80){grade[i]=9;}
        else if(marks[i]>=70){grade[i]=8;}
        else if(marks[i]>=60){grade[i]=7;}
        else if(marks[i]>=50){grade[i]=6;}
        else if(marks[i]>=40){grade[i]=5;}
        else if(marks[i]>=0){grade[i]=0;}
    }
}
void output(float credits[],float grade[],int n) {
    float sum=0,cre=0,sgpa;
    for(int i=0;i<n;i++)
    { sum = sum + (credits[i]*grade[i]);
      cre=cre + credits[i];
    }
    sgpa = sum/cre;
    System.out.println(name+" with usn "+usn+" your sgpa is "+sgpa);
}
}

class studentsgpa{
public static void main(String args[])
{
    student s= new student();
    int n;
    Scanner obj = new Scanner(System.in);
    System.out.println("Enter usn and name");
    s.usn = obj.nextLine();
    s.name=obj.nextLine();
    System.out.println("Enter number of subjects");
    n = obj.nextInt();
    s.input(n);
    s.output(s.credits, s.grade, n);
}
}

```

operable program or batch file.

E:\Java Practise>cd "00J Lab"

E:\Java Practise\00J Lab>cd "Lab-2 Programs"

E:\Java Practise\00J Lab\Lab-2 Programs>javac studentsgpa.java

E:\Java Practise\00J Lab\Lab-2 Programs>java studentsgpa

Enter usn and name

1BM19CS154

Shreesha N A

Enter number of subjects

3

Enter credit of subject 1

2

Enter marks of subject 1

90

Enter credit of subject 2

3

Enter marks of subject 2

85

Enter credit of subject 3

4

Enter marks of subject 3

78

Shreesha N A with usn 1BM19CS154 your sgpa is

8.77778

E:\Java Practise\00J Lab\Lab-2 Programs>