```java
import java.util.Scanner;

class student{

    String usn;
    String name;
    float[] credits= new float[30];
    float[] marks = new float[30];
    float[] grade = new float[30];
    Scanner in = 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]=in.nextFloat();
            System.out.println("Enter marks of subject"+(i+1));
            marks[i]=in.nextFloat();
            if(marks[i]>=90&&marks[i]<=100){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]>=0&&marks[i]<=40){grade[i]=0;}
        }
    }

    void output(float credits[],float grade[],int n) {
        float sum=0,cre=0,sgpa;

        for(int i=0;i<n;i++)
```

```java
            { sum = sum + (credits[i]*grade[i]);
             cre=cre + credits[i];
            }


        sgpa = sum/cre;
        System.out.println("Student Details are :");


        System.out.println("Name : " +name);
        System.out.println("USN  : " +usn);
        System.out.println("SGPA : " +sgpa);


}
}


class Main{
public static void main(String args[])
{
student s= new student();
int n;
Scanner input = new Scanner(System.in);
System.out.println("Enter name of Student");


s.name=input.nextLine();
System.out.println("Enter USN");


s.usn = input.nextLine();


System.out.println("Enter number of subjects");
n = input.nextInt();
s.input(n);
```

```
s.output(s.credits, s.grade, n);

}


}
```

```
Enter name of Student
Rocky
Enter USN
157
Enter number of subjects
5
Enter credit of subject1
3
Enter marks of subject1
91
Enter credit of subject2
4
Enter marks of subject2
94
Enter credit of subject3
3
Enter marks of subject3
86
Enter credit of subject4
4
Enter marks of subject4
98
Enter credit of subject5
5
Enter marks of subject5
100
Student Details are :
Name : Rocky
USN  : 157
SGPA : 9.842105
```