2> Develop a Java program to create a class Student with members usn, name, an array credits and array marks. Include methods to accept and display details and a method to calculate SGPA of a student.

→
$$SGPA = \frac{\sum (course\ credits)(Grade\ points)}{\sum (course\ credits)}$$

```java
import java.util.Scanner;
class Subject{
        int subjectMarks;
        int credits;
        int grade;
}
class student{
        String name;
        String usn;
        double SGPA;
        Scanner s;
        Subject subject[];
        student()
        {
                int i;
                subject = new Subject[9];
                for(i=0; i<9; i++)
                {
                        subject[i] = new Subject();
                }
                s = new Scanner(system.in);
        }
```

```java
void getStudentDetails() {
    System.out.println("Enter the name:");
    name = s.nextLine();
    System.out.println("Enter the USN:");
    usn = s.nextLine();
}


void getMarks() {
    int i;
    for (i=0; i<9; i++)
    {
        System.out.println("Enter the marks & credits for course
                            "+(i+1)+":");
        System.out.println("Marks:");
        int marks = s.nextInt();
        System.out.println("Credits:");
        int credits = s.nextInt();
        subject[i].subjectMarks = marks;
        subject[i].credits = credits;
        subject[i].grade = (subject[i].subjectMarks)/(10) +1;
        if (subject[i].grade ==11)
        {
            subject[i].grade =10;
        }
        if (subject[i].grade <=4)
        {
            subject[i].grade =0;
        }
    }
}
```

```java
void computeSGPA()
{
        int total-credits = 0;
        int i;
        for(i = 0; i < 9; i++)
        {
                totalgrade and credit += subject[i].credits * subject[i].grade
        }
        double SGPA = (float) totalgrade and credit/total_credits;
        System.out.println("Your SGPA is :" + SGPA);
}
}

class Main{
        public static void main(string args[]){
                student s1 = new student();
                s1.get Student Details();
                s1.get Marks();
                s1.compute SGPA();
        }
}
```

Output:
Enter the name : Santosh Jambagi
Enter the USN : 1BM22CS244

Enter the marks and credits for course 1:
Marks: 88
credits: 4

Enter the marks and credits for course 2:
Marks: 89
credits: 4

course 3:
Marks: 89
credits: 3

Course 4:
Marks: 82
credits: 1

course 5:
Marks: 91
credits: 1

Course 6:
Marks: 90
credits: 3

course 7:
Marks: 81
credits: 3

Course 8:
Marks: 97
credits: 1

Your SGPA is: 9.25