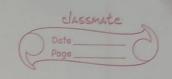Develop a Java program to create a Student class
with members usn, name, an array credits and
array marks. Include methods to accept and display
details and a method to calculate SGPA of
a student

c = Course credits x Grade points
       ———————————————————————
           Σ course credits

```java
import java.util.*;
class Subject {
    int subjectMarks;
    int credits;
    int grade;
}

class Student {
    Subject subject[];
    String name;
    String usn;
    double cgpa;
    Scanner sc;

    Student() {
        int i;
        subject = new Subject [8];
        sc = new Scanner (System.in);
        for (i=0 ; i < 8; i++)
            subject [i] = new Subject ();
    }

    void getstudentdetails () {
        System.out.println ("Enter your name :");
        this.name = sc.next();
        System.out.println ("Enter your USN:");
        this.usn = sc.next()
    }
```

```java
void getMarks() {
    for (int i=0; i<8; i++) {
        System.out.println("Enter marks for subject"+(i+1)":");
        subject[i].subjectMarks = sc.nextInt();
        System.out.println("Enter credits for subject "+(i+1)":");
        subject[i].credits = sc.nextInt();
        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;
    }
}

void computeSGPA() {
    int effectiveScore = 0;
    int totalCredits = 0;
    for (int i=0; i<8; i++) {
        effectiveScore += (subject[i].grade * subject[i].credits);
        totalCredits += subject[i].credits;
    }
    sgpa = (double) effectiveScore/(double) totalCredits;
}
}

class Main {
    public static void main(String[] args)
    {
        Student s1 = new Student();
        s1.getStudentdetails();
        s1.getMarks();
        s1.computeSGPA();
        System.out.println("Name = "+s1.name);
        System.out.println("USN : " +s1.usn);
        System.out.println("SGPA = "+ s1.sgpa);
    }
}
```

Output:

Enter your name:

Shreyas Rao M

Enter your USN:

1BM22CS272

Enter marks for subject 1:

99

Enter credits for subject1:

4

Enter marks for subject2:

95

Enter credits for subject2:

4

Enter marks for subject 3:

96

Enter credits for subject3:

3

Enter marks for subject 4:

92

Enter credits for subject4:

3

Enter marks for subject 5:

89

Enter credits for subject 5,

3

Enter marks for subject 6:

99

Enter credits for subject6:

▸

Enter ~~credits~~ marks for subject 7:

100

Enter credits for subject 7:

1

Enter marks for subject 8:
96
Enter credits for subject8
1

Name = Shreyas Rao M
USN = 1BM22CS272
(10) SGPA = 9.85

19/12/23