

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

```

import java.util.*;
import java.util.Scanner;
class Student
{
    String usn;
    String name;
    int credits[];
    int marks[];
    int gpa[];
    int i, n;
    void accept()
    {
        Scanner xx = new Scanner(System.in);
        System.out.println("Enter the number of subjects");
        n = xx.nextInt();
        credits = new int[n];
        marks = new int[n];
        gpa = new int[n];
        System.out.println("ENTER STUDENT DETAILS ^n");
        System.out.println("Enter student USN");
        usn = xx.next();
        System.out.println("Enter student name");
        name = xx.next();
        System.out.println("Enter student marks in " + n + " Subjects");
        for (i = 0; i < n; i++)
    }

```

```

System.out.println("Enter credits of subject" + (i+1));
Credits[i] = xx.nextInt();
System.out.println("Enter marks of subject" + (i+1));
marks[i] = xx.nextInt();

```

3

3

void display()

```

{
    System.out.println("\n STUDENT NAME = " + name);
    System.out.println("\n USN = " + usn + "\n");
    for (i=0; i<n; i++)
        System.out.println("Credits for subject" + (i+1) + " = " +
            Credits[i] + "\t" + "marks in subject" + (i+1) + " = " +
            marks[i] + "\t" + "gpa = " + gpa[i]);
}

```

void calsgpa()

```

{
    int totalCredits = 0;
    int totalmarks = 0;
    float sgpa;
    for (i=0; i<n; i++)
        totalCredits = totalCredits + Credits[i];
    for (i=0; i<n; i++)
        if (marks[i] >= 90 & marks[i] <= 100)
            gpa[i] = 10;
        else if (marks[i] >= 80 & marks[i] < 90)
            gpa[i] = 9;
        else if (marks[i] >= 70 & marks[i] < 80)
            gpa[i] = 8;
}

```

```

else if (marks[i] >= 60 && marks[i] < 70)
    gpa[i] = 7;
else if (marks[i] >= 50 && marks[i] < 60)
    gpa[i] = 5;
else if (marks[i] >= 40 && marks[i] < 50)
    gpa[i] = 4;
else
    gpa[i] = 0;

```

```

}
for (i = 0; i < n; i++)

```

```

{
    totalmarks = totalmarks + (credits[i] * gpa[i]);
}

```

```

}
sgpa = (float) totalmarks / total credits;
System.out.println("In In SGPA = " + sgpa);

```

```

}
class main

```

```

{
    public static void main (String[] args)
    {

```

```

        Student s1 = new Student();

```

```

        s1.accept();

```

```

        s1.calculategpa();

```

```

        s1.display();
    }
}

```