Develop a java program to create a class student with members usn ,name an array of credits and array of marks include methods to accept and display details and a method to calculate sgpa of a student.

```
import java.util.Scanner;


class Student {
   int n;
   String usn;
   String name;
   int[] marks;
   int[] credits;


   void calculate() {
      Scanner sc = new Scanner(System.in);
      System.out.print("Enter student name: ");
      name = sc.nextLine();
      System.out.print("Enter student USN: ");
      usn = sc.nextLine();
      System.out.print("Enter the number of subjects: ");
      n = sc.nextInt();


      marks = new int[n];
      credits = new int[n];


      for (int i = 0; i < n; i++) {
         System.out.print("Enter subject " + (i + 1) + " marks and credits: ");
         marks[i] = sc.nextInt();
         credits[i] = sc.nextInt();
      }
   }


   float sgpa() {
```

```
        int result = 0;
        int sum = 0;
        for (int i = 0; i < n; i++) {
            result += grade(marks[i]) * credits[i];
            sum += credits[i];
        }
        return (float) result / sum;
    }

    int grade(int marks) {
        if (marks >= 90) return 10;
        else if (marks >= 80) return 9;
        else if (marks >= 70) return 8;
        else if (marks >= 60) return 7;
        else if (marks >= 50) return 6;
        else if (marks >= 40) return 5;
        else return 0;
    }

    void display(float sgpa) {
        System.out.println("\nStudent name: " + name);
        System.out.println("USN: " + usn);
        System.out.printf("SGPA: %.2f\n", sgpa);
    }
}

public class Sgpa {
    public static void main(String[] args) {
        Student s1 = new Student();
        s1.calculate();
        float r = s1.sgpa();
```

```
        s1.display(r);
    }
}
```

Output: