1BM19CS216
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classmate
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Lab Program2

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

```java
import java.util.*;
class Student {
    private String usn;
    private String name;
    private int credits[]
    private int marks[]
    private int n;

    void accept()
    {
        Scanner s=new Scanner(System.in);
        System.out.println("Enter the student details:");
        System.out.println("USN
        usn =s.next();
        System.out.println("Name
        name = s.next();
        System.out.println("Enter the number of
                            subjects : ");
        n = s.nextInt();
        credits = new int[n];
        marks = new int[n];
        System.out.println("Enter details for the subjects
                            : ");
```

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

    void display()
    {
        System.out.println("-----------------");
        System.out.println("The Student's details are: ");
        System.out.println("USN : " + usn);
        System.out.println(" Name : " + name);
        System.out.println("Marks in each subject :");
        for (int i=0; i<n; i++)
        {
            System.out.println("Subject "+ (i+1)+ " = "+marks[i]
        }
    }

    double calculate()
    {
        int tcp=0, tc=0;
        for (int i=0; i<n; i++)
        {
            tc = tc + credits[i];
            if (marks[i] >= 50)
```

```java
    {
        tcp = tcp + (((marks[i]/10)+1) * credits[i]);
    }
    else if (marks[i] >= 40 && marks[i] < 50)
    {
        tcp = tcp + (4 * credits[i]);
    }
    }
    return (double) tcp/tc;
    }
}


public class Main
{
    public static void main(String args[]) {
        Student s1 = new Student();
        s1.accept();
        s1.display();
        System.out.println("SGPA : " + s1.calculate());
        System.out.println("-------------");
    }
}
```