## PROGARM 2

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.

## CODE:

```
import java.util.Scanner;

class Student {

   String usn;
   String name;
   int[] credits;
   int[] marks;

public void acceptDetails(int numberOfSubjects) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter USN: ");
        usn = scanner.nextLine();

        System.out.print("Enter Name: ");
        name = scanner.nextLine();

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

        for (int i = 0; i < numberOfSubjects; i++) {</pre>
```

```
System.out.print("Enter credits for subject " + (i + 1) + ":
            credits[i] = scanner.nextInt();
            System.out.print("Enter marks for subject " + (i + 1) + ": ");
           marks[i] = scanner.nextInt();
   public void displayDetails() {
        System.out.println("\nStudent Details:");
       System.out.println("USN: " + usn);
       System.out.println("Name: " + name);
       System.out.println("Credits and Marks:");
       for (int i = 0; i < credits.length; i++) {</pre>
           System.out.println("Subject " + (i + 1) + " - Credits: " +
credits[i] + ", Marks: " + marks[i]);
   public double calculateSGPA() {
        int totalCredits = 0;
       double weightedMarks = 0;
       for (int i = 0; i < credits.length; i++) {</pre>
            totalCredits += credits[i];
            weightedMarks += credits[i] * (marks[i] / 10.0); // Assuming
       return weightedMarks / totalCredits;
public class Main {
   public static void main(String[] args) {
```

```
Scanner scanner = new Scanner(System.in);

System.out.print("Enter the number of subjects: ");
int numberOfSubjects = scanner.nextInt();

Student student = new Student();

student.acceptDetails(numberOfSubjects);

student.displayDetails();

double sgpa = student.calculateSGPA();
    System.out.println("\nThe SGPA of " + student.name + " is: " + sgpa);

scanner.close();
}
```

## **OUTPUT**:

```
Enter the number of subjects: 4
Enter USN: 1BM23CS329
Enter Name: SINCHANA
Enter credits for subject 1: 4
Enter marks for subject 2: 3
Enter credits for subject 2: 98
Enter credits for subject 3: 2
Enter marks for subject 3: 97
Enter credits for subject 4: 3
Enter marks for subject 4: 3
Enter credits for subject 4: 99

Student Details:
USN: 1BM23CS329
Name: SINCHANA
```

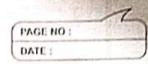
```
Credits and Marks:
Subject 1 - Credits: 4, Marks: 99
Subject 2 - Credits: 3, Marks: 98
Subject 3 - Credits: 2, Marks: 97
Subject 4 - Credits: 3, Marks: 99
The SGPA of SINCHANA is: 9.84166666666667
```

## NOTES:

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	System-out print ("Filter USN");	
	USn = Sc. nextLine();	
	System.out. print (4 Enter name);	
	name = sc. nextline();	
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	marks = new Int Commanbjects ]:	
	Parabaci Sectional district	
	for (Int ?=0; 1< num subjects; ?++)}	
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	+ (1+1) + u 11);	

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	for (redits (1) + umarks (1);
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	double calculate SGPA(1)3
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	double weighted sum= 0.0;
	for lint 1=0. 1< credits. length : 1+1)}
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	g corighted sum / total red 2ts;
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	Int get gradepoint (Int marks) }
	12 1 40 1 1 1
	else if (marks)=80) return q.
P4.014	else if (marks = 60) return 7;
	else if (marks - 50) return 7;
	else if (marks >=40) returns;
(0.4.5)	else return a returns;
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	subject 2: credite =11
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