Program 2

```java
import java.util.Scanner;

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

    public void acceptDetails() {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter USN: ");
        usn = sc.nextLine();
        System.out.print("Enter Name: ");
        name = sc.nextLine();

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

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

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

    public void displayDetails() {
```

```java
        System.out.println("USN: " + usn);
        System.out.println("Name: " + name);
        for (int i = 0; i < credits.length; i++) {
            System.out.println("Subject " + (i + 1) + " - Credits: " + credits[i] + ", Marks: " + marks[i]);
        }
    }

    public double calculateSGPA() {
        int totalCredits = 0;
        int weightedMarks = 0;
        for (int i = 0; i < credits.length; i++) {
            totalCredits += credits[i];
            weightedMarks += credits[i] * marks[i];
        }
        return (double) weightedMarks / totalCredits;
    }
}

public class Main {
    public static void main(String[] args) {
        Student student = new Student();
        student.acceptDetails();
        student.displayDetails();
        double sgpa = student.calculateSGPA();
        System.out.println("SGPA: " + sgpa);
    }
}
```

Output

```
Enter USN: 24BECS424
Enter Name: UMESHA H N
Enter the number of subjects: 4
Enter credits for subject 1: 4
Enter marks for subject 1: 98
Enter credits for subject 2: 3
Enter marks for subject 2: 97
Enter credits for subject 3: 2
Enter marks for subject 3: 94
Enter credits for subject 4: 4
Enter marks for subject 4: 100
USN: 24BECS424
Name: UMESHA H N
Subject 1 - Credits: 4, Marks: 98
Subject 2 - Credits: 3, Marks: 97
Subject 3 - Credits: 2, Marks: 94
Subject 4 - Credits: 4, Marks: 100
SGPA: 97.76923076923077
```