

```
import java.util.Scanner;

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

    Student() {
        Scanner sc = new Scanner(System.in);

        System.out.print("Enter USN: ");
        this.usn = sc.next();

        System.out.print("Enter Name: ");
        this.name = sc.next();

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

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

        System.out.println("Enter Credits of Courses:");
        for (int i = 0; i < credits.length; i++) {
```

```
credits[i] = sc.nextInt();  
}
```

```
System.out.println("Enter Marks obtained:");  
for (int i = 0; i < marks.length; i++) {  
    marks[i] = sc.nextInt();  
}
```

```
sc.close(); // Closing Scanner to prevent resource leak  
}
```

```
void calculateSGPA() {  
    int total = 0;  
    int totalCredits = 0;  
  
    for (int i = 0; i < credits.length; i++) {  
        int grade = marks[i] / 10;  
        if (marks[i] >= 90) grade = 10;  
        else if (marks[i] >= 80) grade = 9;  
        else if (marks[i] >= 70) grade = 8;  
        else if (marks[i] >= 60) grade = 7;  
        else if (marks[i] >= 50) grade = 6;  
        else if (marks[i] >= 40) grade = 5;  
        else grade = 0; // Handle failed subject  
  
        total += grade * credits[i];  
    }  
}
```

```

        totalCredits += credits[i];
    }

    float sgpa = (float) total / totalCredits;

    System.out.println(this.name + " got");

    System.out.printf("SGPA: %.2f%n", sgpa);
}
}

public class Main {

    public static void main(String[] args) {

        Student student = new Student();

        student.calculateSGPA();

    }
}

```

```

Enter USN: 1bm
Enter Name: ar
Enter the number of courses: 3
Enter Credits of Courses:
3
4
5
Enter Marks obtained:
15
34
65
ar got
SGPA: 2.92

=== Code Execution Successful ===

```