

Lab Program 2

```
import java.util.Scanner;

class Student {

    String usn;

    String name;

    int numSubjects;

    int[] credits;

    int[] marks;

    public void acceptDetails(Scanner scanner) {

        System.out.print("Enter Student Name: ");

        name = scanner.nextLine();

        System.out.print("Enter Student USN: ");

        usn = scanner.nextLine();

        System.out.print("Enter the total number of subjects: ");

        numSubjects = scanner.nextInt();

        credits = new int[numSubjects];

        marks = new int[numSubjects];

        System.out.println("Enter Details for " + numSubjects + " Subjects");

        for (int i = 0; i < numSubjects; i++) {

            System.out.println("Subject " + (i + 1) + ":");

            System.out.print(" Enter Marks (out of 100): ");

            marks[i] = scanner.nextInt();

            System.out.print(" Enter Credits: ");

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

```
    }

}

public double calculateSGPA() {

    double totalGradePoints = 0.0;

    int totalCredits = 0;

    for (int i = 0; i < numSubjects; i++) {

        int mark = marks[i];

        int credit = credits[i];

        int gradePoint;

        if (mark >= 90) {

            gradePoint = 10;

        } else if (mark >= 80) {

            gradePoint = 9;

        } else if (mark >= 70) {

            gradePoint = 8;

        } else if (mark >= 60) {

            gradePoint = 7;

        } else if (mark >= 50) {

            gradePoint = 6;

        } else if (mark >= 40) {

            gradePoint = 5; // Pass

        } else {

            gradePoint = 0; // Fail

        }

        totalGradePoints += (gradePoint * credit);

        totalCredits += credit;

    }

}
```

```
if (totalCredits == 0) {  
    return 0.0;  
}  
  
return totalGradePoints / totalCredits;  
}  
  
public void displayDetails() {  
  
    System.out.println("STUDENT DETAILS REPORT");  
  
    System.out.println("Name: " + name);  
  
    System.out.println("USN: " + usn);  
  
    System.out.println("\nCourse Details");  
  
  
    for (int i = 0; i < numSubjects; i++) {  
  
        System.out.println("Subject " + (i + 1) + ": Marks = " + marks[i] + ", Credits = " +  
        credits[i]);  
  
    }  
  
    double sgpa = calculateSGPA();  
  
    System.out.printf(" Final SGPA: %.2f\n", sgpa);  
}  
  
}  
  
public class StudentDemo {  
  
  
public static void main(String[] args) {  
  
    Scanner scanner = new Scanner(System.in);  
  
    Student s1 = new Student();  
  
    System.out.println("Please Enter Student Information");  
  
    s1.acceptDetails(scanner);  
  
    s1.displayDetails();  
  
    scanner.close();  
}
```

```
}
```

```
}
```

```
+ FullyQualifiedErrorHandler : CommandNotFoundException
PS Focus folder in explorer (ctrl + click) | p\oops_1BF424CS260> javac StudentDemo.java
PS C:\Users\saanvi\OneDrive\Desktop\oops_1BF424CS260> java StudentDemo
Please Enter Student Information
Enter Student Name: Lia
Enter Student USN: 1BF24CS289
Enter the total number of subjects: 5
Enter Details for 5 Subjects
Subject 1:
Enter Marks (out of 100): 98
Enter Credits: 4
Subject 2:
Enter Marks (out of 100): 89
Enter Credits: 4
Subject 3:
Enter Marks (out of 100): 98
Enter Credits: 4
Subject 4:
Enter Marks (out of 100): 78
Enter Credits: 4
Subject 5:
Enter Marks (out of 100): 96
Enter Credits: 4
STUDENT DETAILS REPORT
Name: Lia
USN: 1BF24CS289

Course Details
Subject 1: Marks = 98, Credits = 4
Subject 2: Marks = 89, Credits = 4
Subject 3: Marks = 98, Credits = 4
Subject 4: Marks = 78, Credits = 4
Subject 5: Marks = 96, Credits = 4
Final SGPA: 9.40
PS C:\Users\saanvi\OneDrive\Desktop\oops_1BF424CS260>
```



Build with Agent

AI responses may be inaccurate.
Generate Agent Instructions to onboard AI onto your codebase.

SUGGESTED ACTIONS

[Build Workspace](#) [Show Config](#)

StudentDemo.java

Describe what to build next

Agent Auto

Ln 7, Col 17 Spaces: 4 UTF-8 CRLF { } Java