

## 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();
    }
}

```

}

}

+ FullyQualifiedErrorId : 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