

LAB-2 program

```
import java.util.Scanner;
```

```
class Student {
```

```
    private String USN;
```

```
    private String name;
```

```
    private int[] credits;
```

```
    private int[] marks;
```

```
    public Student (String USN, String name, int[]  
                    credits, int[] marks) {
```

```
        this.USN = USN;
```

```
        this.name = name;
```

```
        this.credits = credits;
```

```
        this.marks = marks;
```

```
}
```

```
    public void accept details () {
```

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

```
        System.out.println ("Enter USN:");
```

```
        USN = sc.nextLine();
```

```
        System.out.println ("Enter Name: ");
```

```
        name = sc.nextLine();
```

```
        System.out.println ("Enter the number  
        of subjects:");
```

```
        int numSubjects = sc.nextInt();
```

```
        credits = new int[numSubjects];
```

```
        marks = new int[numSubjects];
```

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

```
            System.out.println ("Enter the  
            credits for subjects " + (i+1) + ":");
```

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

```
            System.out.println ("Enter the mark  
            for subject " + (i+1) + ":");
```

```
            marks[i] = sc.nextInt();
```

```

public void display details () {
    System.out.println("USN: "+USN);
    System.out.println("Name: "+name);
    for (int i=0; i < credits.length; i++) {
        System.out.println("Subject: "
            + ": credits: "+credits[i]+", Mark: "+
            marks[i]);
    }
}

```

}

```

public double calculate sgpa () {
    double total Credit points = 0;
    double total Credits = 0;
    for (int i=0; i < credits.length; i++) {
        total Credit points + credits[i] * get
        Grade points (marks[i]);
        total Credits += credits[i];
    }
    return total credit points / total
    credits;
}

```

}

```

private double get Grade points (int marks) {
    if (marks >= 90)
        return 10.0;
    } else if (marks >= 80) {
        return 9.0;
    } else if (marks >= 70) {
        return 8.0;
    } elseif (marks >= 60) {
        return 7.0;
    } elseif (marks >= 50) {
        return 6.0;
    } else {
        return 0.0;
    }
}

```

}

}

```
public static void main (String[] Args) {
```

```
    Student new Student ("1B
```

```
        student.acceptDetails();
```

```
        student.displayDetails();
```

```
        System.out.println("SGPA: " + student.  
            calculateSGPA());
```

```
    }
```

```
}
```

OUTPUT'

Enter USN:

1BM22CS229

Enter name:

Rakhal.

Enter number of Subjects

3

Enter credit for Subjects 1

3

Enter mark for subjects 1

90

Enter credit for Subject 2

Enter 4

Enter marks for subject 2

90

Enter credit for Subject 3

4

Enter marks for subject 3

85

SGPA: 9.6363

