

NAME :- TASMIYA FATHIMA

VSU :- 1BM19CS172

COMPASS

Date :

## LAB-2

Develop a Java program to create a class Student with members VSN, name, an array credits and an array marks. Include methods to accept and display details and a method to calculate SGPA of a student.

```
import java.util.*;  
class Student13  
{
```

```
    String VSN;  
    String name;  
    int credits[];  
    int marks[];  
    int n, tot = 0;  
    double SGPA;
```

```
    Student13()  
{
```

```
        SGPA = 0;  
    }
```

```
    void input()  
{
```

```
        Scanner sc = new Scanner(System.in);  
        System.out.println("Enter the VSN and the  
                             name of the student");
```

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

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

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

```
        n = sc.nextInt();
```

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

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



```

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

```

```

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

```

```

void grade-points()
{

```

```

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

```

```

        if (marks[i] >= 90 && marks[i] < 100)
            marks[i] = 10;

```

```

        else if (marks[i] >= 80 && marks[i] < 90)
            marks[i] = 9;

```

```

        else if (marks[i] >= 70 && marks[i] < 80)
            marks[i] = 8;

```

```

        else if (marks[i] >= 60 && marks[i] < 70)
            marks[i] = 7;

```



```
else if (marks[i] > 50 && marks[i] < 60)
    marks[i] = 60;
```

```
else if (marks[i] >= 60 && marks[i] < 50)
    marks[i] = 4;
```

```
else if (marks[i] < 40)
    marks[i] = 0;
```

```
}
```

```
}
```

```
void calculate_SGPA()
{
```

```
    int i;
```

```
    for (i=0; i<n; i++)
    {
```

```
        SGPA = SGPA / tot;
```

```
        SGPA = SGPA + (credits[i] * marks[i]);
```

```
    }
```

```
    SGPA = SGPA / tot;
```

```
}
```

```
void display_details()
{
```

```
    System.out.println("The student with  

    USN: " + USN + ", Name: " + name + ", SGPA: "  

    + SGPA);
```

```
}
```

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

```
    student13 obj = new student();
```

```
Obj. input();
Obj. grade_points();
Obj. calculate_SGPA();
Obj. display_details();
3
3
```