

LAB-2

**/*Develop a Java program to create a class Student with members usn, 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.Scanner;  
class Student  
{  
    private String USN;  
    private String name;  
    private int n;  
    private double SGPA = 0;  
    private int totalCredits = 0;  
    Scanner ss = new Scanner(System.in);  
  
    void Details()  
    {  
        System.out.println("Enter USN of the student");  
        USN = ss.nextLine();  
        System.out.println("Enter Name of the student");  
        name = ss.nextLine();  
        System.out.println("Enter no of subjects");  
        n = ss.nextInt();  
        int credits[] = new int[n];  
        double marks[] = new double[n];  
        System.out.println("*****Enter details of the subjects:*****");  
        for(int i=0;i<n;i++)  
        {  
            System.out.println("Enter credits allotted to the subject "+(i+1));  
            credits[i] = ss.nextInt();  
            System.out.println("Enter marks in the subject "+(i+1));  
            marks[i] = ss.nextInt();  
            Calculate(credits[i],marks[i],i);  
        }  
    }  
}
```

```

void Calculate(int credit,double mark,int j)
{
    totalCredits = totalCredits + credit;
    if(mark>=90&&mark<=100)
        SGPA = SGPA + (10*credit);
    else if(mark>=80 && mark<=89)
        SGPA = SGPA + (9*credit);
    else if(mark>=70&&mark<=79)
        SGPA = SGPA + (8*credit);
    else if(mark>=60&&mark<=69)
        SGPA = SGPA + (7*credit);
    else if(mark>=50 && mark<=59)
        SGPA = SGPA + (6*credit);
    else if(mark>=40&&mark<=49)
        SGPA = SGPA + (5*credit);
    else
        System.out.println("Failed in Subject "+(j+1));
}
void Display()
{
    System.out.println("Details of the Student");
    System.out.println("USN: "+USN);
    System.out.println("Name :"+name);
    System.out.println("SGPA of Student "+(SGPA/totalCredits));
}
}
class Main
{
    public static void main(String args[])
    {
        Student s1 = new Student();
        s1.Details();
        s1.Display();
    }
}

```

Command Prompt

```
Enter no of subjects
5
****Enter details of the subjects:****
Enter credits allotted to the subject 1
5
Enter marks in the subject 1
56
Enter credits allotted to the subject 2
3
Enter marks in the subject 2
77
Enter credits allotted to the subject 3
3
Enter marks in the subject 3
22
Failed in Subject 3
Enter credits allotted to the subject 4
6
Enter marks in the subject 4
89
Enter credits allotted to the subject 5
3
Enter marks in the subject 5
56
Details of the Student
USN: 1BM19CS061
Name :HEMANG
SGPA of Student 6.3

D:\coding files\OOJ Lab>
```