# Lab Program 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.**

**Solution:-**

```java
import java.util.Scanner;

class Student
{
    String USN;

    String name;

    int n;

    double SGPA = 0;

    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 Number 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++)
```

```java
    {
        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");
```

```java
    System.out.println("Name :"+name);

    System.out.println("USN: "+USN);

    System.out.println("SGPA Of Student "+(SGPA/totalCredits));
 }
}


public class Lab4_2
{
   public static void main(String args[])
 {
     Student s1 = new Student();

     s1.Details();

     s1.Display();
 }
}
```

```
Microsoft Windows [Version 10.0.19041.388]
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C:\Users\dell\OneDrive\Desktop\java\lab assignments>javac Lab4_2.java

C:\Users\dell\OneDrive\Desktop\java\lab assignments>java Lab4_2
Enter USN of the Student
193
Enter Name of the Student
Ankit
Enter Number of Subjects
5
Enter Details of the Subjects:
Enter Credits Allotted to the Subject 1
5
Enter Marks in the Subject 1
75
Enter Credits Allotted to the Subject 2
4
Enter Marks in the Subject 2
80
Enter Credits Allotted to the Subject 3
4
Enter Marks in the Subject 3
85
Enter Credits Allotted to the Subject 4
4
Enter Marks in the Subject 4
95
Enter Credits Allotted to the Subject 5
3
Enter Marks in the Subject 5
60
Details of the Student
Name :Ankit
USN: 193
SGPA Of Student 8.65
```

```
C:\Users\dell\OneDrive\Desktop\java\lab assignments>java Lab4_2
Enter USN of the Student
056
Enter Name of the Student
Sanket
Enter Number of Subjects
2
Enter Details of the Subjects:
Enter Credits Allotted to the Subject 1
5
Enter Marks in the Subject 1
25
Failed In Subject 1
Enter Credits Allotted to the Subject 2
4
Enter Marks in the Subject 2
80
Details of the Student
Name :Sanket
USN: 056
SGPA Of Student 4.0

C:\Users\dell\OneDrive\Desktop\java\lab assignments>
```