

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.

```
import java.util.Scanner;
class student{
    String usn , name;
    int credits[] = new int[10];
    int marks[]= new int[10];
    int i;
    float sgpa;
    Scanner in =new Scanner(System.in);
    void read_details()
    {
        System.out.print("Enter your name :");
        name = in.nextLine();
        System.out.print("Enter your USN :");
        usn = in.nextLine();
        System.out.print("Enter credits for each subject :");
        for (i=0;i<6 ;i++ ) {
            System.out.print("Subject "+(i+1)+" :");
            credits[i]= in.nextInt();
        }
        System.out.print("Enter marks in each subject :");
        for (i=0;i<6 ;i++ ) {
            System.out.print("Subject "+(i+1)+" :");
            marks[i]= in.nextInt();
        }
    }
    void display_details()
    { int i;
        System.out.println("the student details are :");
        System.out.println("Name :"+name);
        System.out.println("USN :"+usn);
```

```

        System.out.println("Credits for each subject :");
        for (i=0;i<6 ;i++ ) {
            System.out.println("Subject "+(i+1)+" credits
:"+credits[i]);
        }
        System.out.println("Marks in each subject :");
        i=0;
        for (i=0;i<6 ;i++ ) {
            System.out.println("Subject "+(i+1)+" marks
:"+marks[i]);
        }
        calc_sgpa();
        System.out.println("Sgpa :"+sgpa);
    }
    void calc_sgpa()
    {
        float sumgp=0;
        float sumcred=0;
        int gp=0;
        for (i=0;i<6 ;i++ )
        {
            if (marks[i]>=90) gp=10;
            else if(marks[i]>=80) gp=9;
            else if(marks[i]>=70) gp=8;
            else if(marks[i]>=60) gp=7;
            else if(marks[i]>=50) gp=6;
            else gp=5;
            sumgp=sumgp+(gp*credits[i]);
            sumcred=sumcred+credits[i];
        }

        sgpa=(sumgp/sumcred);
    }
}
class student_main
{
    public static void main(String[] args)
    {

```

```
        student s= new student();
        s.read_details();
        s.display_details();
    }
}
```

```
PS D:\sem3\ooj_lab\09-10-2020> javac .\student_main.java
PS D:\sem3\ooj_lab\09-10-2020> java student_main
Enter your name :qwerty
Enter your USN :123
Enter credits for each subject :Subject 1 :2
Subject 2 :4
Subject 3 :4
Subject 4 :4
Subject 5 :4
Subject 6 :5
Enter marks in each subject :Subject 1 :45
Subject 2 :56
Subject 3 :67
Subject 4 :78
Subject 5 :89
Subject 6 :90
the student details are :
Name :qwerty
USN :123
Credits for each subject :
Subject 1 credits :2
Subject 2 credits :4
Subject 3 credits :4
Subject 4 credits :4
Subject 5 credits :4
Subject 6 credits :5
Marks in each subject :
Subject 1 marks :45
Subject 2 marks :56
Subject 3 marks :67
Subject 4 marks :78
Subject 5 marks :89
Subject 6 marks :90
Sgpa :7.826087
PS D:\sem3\ooj_lab\09-10-2020>
```