

LAB-2

1) Develop a java program to create a class Student with members USN, name, ~~credits~~ an array of credits and an array marks. Include methods to access & 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 student");
```

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

```
        System.out.println("Enter no. of Subjects Students");
```

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

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

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

System.out.println("*** Enter details of student");

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 i)

{

totalCredits = totalCredits + credit;

if (mark >= 90 && mark <= 100)

gpa = gpa + (10 * credit);

else if (mark >= 80 && mark <= 89)

gpa = gpa + (9 * credit);

else if (mark >= 70 && mark <= 79)

gpa = gpa + (8 * credit);

else if (mark >= 60 && mark <= 69)

gpa = gpa + (7 * credit);

else if (mark \geq 50 && mark \leq 59)

SGPA = SGPA + (6 * credit);

else if (mark \geq 40 && mark \leq 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/
total credit));

}

}

class Main

{

public static void main(String args[])

{

Student s1 = new Student ();

s1.Details ();

s1.Display ();

}

}