LAB-2

Q. 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.

PROGRAM:

```java
import java.util.Scanner;
 class Student
{
 String name;
 String usn;
 int credits[] = new int[5];
 int gradepoints[] = new int[5];
 double marks[] = new double[5];
 int i;
 int total_credits=0;
 int sgpa=0;
 Scanner in = new Scanner(System.in);
 void getdetails()
{
 System.out.println("Enter the Name of Student: ");
 name = in.nextLine();
 System.out.println("Enter the USN of Student: ");
 usn = in.nextLine();
 System.out.println("Enter the Credits in the subjects: ");
 for(i=0;i<5;i++)
 {
```

```java
    credits[i] = in.nextInt();

    total_credits = total_credits + credits[i];

  }

 System.out.println("Enter the Marks in the subjects(0-100): ");

 for(i=0;i<5;i++)

 {

  marks[i] = in.nextDouble();

 }

}

void displaydetails()

{

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

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

 for(i=0;i<5;i++)

 {

  System.out.println("Subject "+(i+1)+" --> Marksscored: "+marks[i]+" Credit: "+credits[i]);

 }

 System.out.println("SGPA: "+(double)sgpa/total_credits);

}

void sgpa()

{

for(i=0;i<5;i++)

{

if(marks[i]>=91 && marks[i]<=100)

{

gradepoints[i] = 10;
```

```
}
else if(marks[i]>=81)
{
gradepoints[i] = 9;
}
else if(marks[i]>=71)
{
gradepoints[i] = 8;
}
else if(marks[i]>=61)
{
gradepoints[i] = 7;
}
else if(marks[i]>=51)
{
gradepoints[i] = 6;
}
else if(marks[i]>=41)
{
gradepoints[i] = 5;
}
else if(marks[i]>0 && marks[i]<40)
{
gradepoints[i] = 0;
}
sgpa = sgpa + (gradepoints[i]*credits[i]);
```

```
}

}

}

class Lab2

{

 public static void main(String args[])

 {

  Student std1 = new Student();

  std1.getdetails();

  std1.sgpa();

  std1.displaydetails();

 }
```

```
D:\>java Lab2
Enter the Name of Student:
George
Enter the USN of Student:
1BM19CS197
Enter the Credits in the subjects:
5
5
5
5
5
Enter the Marks in the subjects(0-100):
80
90
60
40
69
Student Name: George
Student USN: 1BM19CS197
Subject 1 --> Marksscored: 80.0 Credit: 5
Subject 2 --> Marksscored: 90.0 Credit: 5
Subject 3 --> Marksscored: 60.0 Credit: 5
Subject 4 --> Marksscored: 40.0 Credit: 5
Subject 5 --> Marksscored: 69.0 Credit: 5
SGPA: 6.0

D:\>_
```