EXERCISE-02

Develop and display details and a method to calculate SGPA of a student. a Java program to create a class Student with members usn, name, an array credits and an array marks. Include methods to accept

```java
import java.util.Scanner;

class student{

void display(String name, String usn)

{


        System.out.println("Enter USN of student:"+usn);

        System.out.println("Enter name of the student:"+name);

}

void calculatesgpa(double[] marks, double[] credits, int number)

{

        double gradepoints[]=new double[number];

        double sgpa,sum=0,tnum=0;

        for(int i=0;i<number;i++)

        {

                if(marks[i]>=90)

                gradepoints[i]=10;

                else if((marks[i]>=80)&&(marks[i]<90))

                gradepoints[i]=9;

                else if((marks[i]>=70)&&(marks[i]<80))

                gradepoints[i]=8;

                else if((marks[i]>=60)&&(marks[i]<70))

                gradepoints[i]=7;

                else if((marks[i]>=50)&&(marks[i]<60))
```

```java
                gradepoints[i]=6;

                else if((marks[i]>=40)&&(marks[i]<50))

                gradepoints[i]=4;

                else

                gradepoints[i]=0;

        }
        for(int i=0;i<number;i++)

                {

                        sum+=credits[i]*gradepoints[i];

                }
        for(int i=0;i<number;i++)

                {

                        tnum+=credits[i];

                }
        sgpa=sum/tnum;

        System.out.println("SGPA is "+sgpa);

}
}
class sgpa{
public static void main(String args[])
{
        Scanner s=new Scanner(System.in);

        System.out.println("Enter name and usn of student:");

        String name=s.next();

        String usn=s.next();

        student s1=new student();

        System.out.println("Enter the number of courses");
```

```java
        int number=s.nextInt();

        double credits[]=new double[number];

        double marks[]=new double[number];

        for(int i=0;i<number;i++)

        {

                System.out.print("Credit of subject "+(i+1) +" : ");

                credits[i]=s.nextDouble();

                System.out.print("Marks of subject "+(i+1) +" : ");

                marks[i]=s.nextDouble();

        }

        s1.display(name,usn);

        s1.calculatesgpa(marks,credits,number);

}

}
```

```
C:\Users\Admin\Desktop\1BM21CS252>java sgpa
Enter name and usn of student:
Yashaswini
1BM21CS255
Enter the number of courses
5
Credit of subject 1 : 4
Marks of subject 1 : 80
Credit of subject 2 : 3
Marks of subject 2 : 60
Credit of subject 3 : 2
Marks of subject 3 : 90
Credit of subject 4 : 1
Marks of subject 4 : 90
Credit of subject 5 : 1
Marks of subject 5 : 90
Enter USN of student:1BM21CS255
Enter name of the student:Yashaswini
SGPA is8.818181818181818

C:\Users\Admin\Desktop\1BM21CS252>
```