WRITE A PROGRAM TO CALCULATE SGPA OF THE STUDENT

```java
import java.io.*;

import java.lang.*;

import java.util.*;

public class lab2

{

    private static int n;

    private static String usn;

    private static String name;

    private static  int credit[];

    private static double mark[];

    public static void read()

    {

        Scanner sc=new Scanner(System.in);

        System.out.println("Enter the Number Of Subjects");

        n=sc.nextInt();

        credit=new int[n];

        mark=new double[n];

        System.out.println("Enter the name of the Student");

        name=sc.next();


        System.out.println("Enter the USN of The Student");

        usn=sc.next();


        System.out.println("Enter the Credits Of The Subject");

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

        {

            credit[i]=sc.nextInt();

        }

        System.out.println("Enter the Marks Of The Student In Corresponding Subjects");
```

```java
        for(int i=0;i<n;i++)

        {

            mark[i]=sc.nextDouble();

        }

    }


    public static int grade(double marks)

    {

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

        {

            return 10;

        }

        else if(marks>=80&&marks<90)

        {

            return 9;

        }

        else if(marks>=70&&marks<80)

        {

            return 8;

        }

        else if(marks>=60&&marks<70)

        {

            return 7;

        }

        else if(marks>=50&&marks<60)

        {

            return 6;

        }

        else if(marks>=40&&marks<50)

        {

            return 5;
```

```java
        }
        else
        {
            System.out.println("You Have Failed In This Subject");
            return 0;
        }
    }


    public static double caclculate()
    {
        read();
        double sgpa;
        double sum_credits=0;
        double sum=0;
        int c;
        for(int i=0;i<n;i++)
        {
            c=grade(mark[i]);
            sum_credits+=credit[i];
            sum=sum+c*credit[i];
        }
        sgpa=(double)(sum/sum_credits);
        return sgpa;
    }
    public static void main(String[] args)
    {
        Scanner sc=new Scanner(System.in);

        double sgpa=caclculate();
        System.out.println("Name Of The Student is " + name);
```
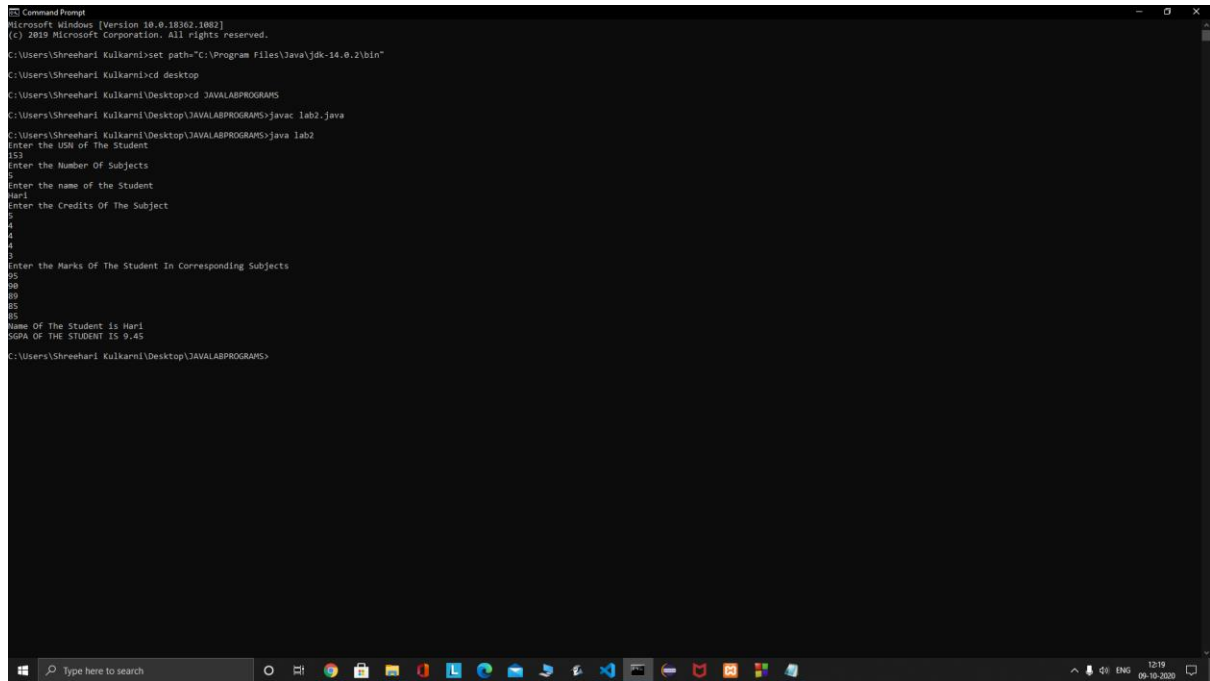
```
System.out.println("SGPA OF THE STUDENT IS " + sgpa);

    }

}
```

OUTPUT: