

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

```
import java.util.Scanner;

class Student {

    String name,USN;

    int marks[] = new int[10];

    int credits[] = new int[10];

    double SGPA=0;

    int n;

    Scanner s=new Scanner(System.in);

    void Input(){

        System.out.println();

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

        name=s.nextLine();

        System.out.print("Enter USN: ");

        USN=s.nextLine();

        System.out.print("Enter the number of courses: ");

        n=s.nextInt();

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

            System.out.println();

            System.out.println("Enter the credits of subject "+(i+1));

            credits[i]=s.nextInt();

            System.out.println("Enter the marks of subject "+(i+1));

            marks[i]=s.nextInt();

        }

    }

    void Display(){
```

```
        System.out.println();
        System.out.println("NAME :"+name);
        System.out.println("USN: "+USN);
        System.out.println("SGPA is "+SGPA);
    }
```

```
void CalcSGPA(){
    double grade=0, totalcred=0;
    int i;

    for(i=0;i<n;i++){
        totalcred=totalcred+credits[i];
    }
```

```
    for(i=0;i<n;i++){

        if(marks[i]>=90)
        {
            grade+=credits[i]*10;
        }
        else if(marks[i]>=80)
        {
            grade+=credits[i]*9;
        }
        else if(marks[i]>=70)
        {
            grade+=credits[i]*8;
        }
        else if(marks[i]>=60)
        {
```

```

        grade+=credits[i]*7;
    }
    else if(marks[i]>=50)
    {
        grade+=credits[i]*6;
    }
    else if(marks[i]>=40)
    {
        grade+=credits[i]*5;
    }
    else{
        grade=0;
    }
}
SGPA=grade/totalcred;
}
}

```

```

class SGPA{
    public static void main(String args[]){

        Student st= new Student();

        st.Input();
        st.CalcSGPA();
        st.Display();
    }
}

```

OUTPUT:

Command Prompt

```
C:\Users\VIGNESH\Downloads\00JLAB>javac Program2_SGPA.java
```

```
C:\Users\VIGNESH\Downloads\00JLAB>java SGPA
```

```
Enter name of the student: VIGNESH
```

```
Enter USN: 1BM21CS240
```

```
Enter the number of courses: 9
```

```
Enter the credits of subject 1
```

```
3
```

```
Enter the marks of subject 1
```

```
88
```

```
Enter the credits of subject 2
```

```
4
```

```
Enter the marks of subject 2
```

```
97
```

```
Enter the credits of subject 3
```

```
1
```

```
Enter the marks of subject 3
```

```
92
```

```
Enter the credits of subject 4
```

```
3
```

```
Enter the marks of subject 4
```

```
87
```

```
Enter the credits of subject 5
```

```
1
```

```
Enter the marks of subject 5
```

```
94
```

```
Enter the credits of subject 6
```

```
3
```

```
Enter the marks of subject 6
```

```
75
```

```
Enter the credits of subject 7
```

```
1
```

```
Enter the marks of subject 7
```

```
90
```

```
Enter the credits of subject 8
```

```
3
```

```
Enter the marks of subject 8
```

```
94
```

```
Enter the credits of subject 9
```

```
1
```

```
Enter the marks of subject 9
```

```
87
```

```
NAME :VIGNESH
```

```
USN: 1BM21CS240
```

```
SGPA is 9.35
```