

Main.java > Student > sgpaClac()

```
1  import java.util.Scanner;
2  class Student{
3      private String usn;
4      private String name;
5      private int[] credits = new int[20];
6      private int[] marks = new int[20];
7      private int n;
8
9      void getDetails(){
10         Scanner sc = new Scanner(System.in);
11         System.out.println("Enter no of subjects:");
12         n = sc.nextInt();
13         System.out.println("Enter Student usn");
14         usn = sc.next();
15         System.out.println("Enter Student name");
16         name = sc.next();
17
18         for(int i = 0; i < n; i++){
19             System.out.println("Enter credits followed by marks for subject " + (i+1) + ":" );
20             credits[i] = sc.nextInt();
21             marks[i] = sc.nextInt();
22         }
23     }
24
25     void printDetails(){
26         System.out.println("Student details are as follows:");
27         System.out.println("Name: " + name + "\tusn: " + usn);
28         for(int i = 0; i < n; i++){
29             System.out.println("Sub" + (i+1) + " Marks is: " + marks[i] + "\tCredit is: " + credits[i]);
30         }
31     }
32 }
33
```

Main.java > Student > sgpaClac()

```
33
34
35 void sgpaClac(){
36     double sgpa;
37     int[] gpcr = new int[n];
38     int credSum = 0, gp, sgpcr = 0;
39     for(int i = 0; i < n; i++){
40         credSum += credits[i];
41         if (marks[i] >= 90){
42             gp = 10;
43         }
44         else if(marks[i] >= 80){
45             gp = 9;
46         }
47         else if(marks[i] >= 70){
48             gp = 8;
49         }
50         else if(marks[i] >= 60){
51             gp = 7;
52         }
53         else if(marks[i] >= 50){
54             gp = 5;
55         }
56         else if(marks[i] >= 40){
57             gp = 4;
58         }
59         else{
60             gp = 0;
61         }
62         gpcr[i] = gp * credits[i];
63         sgpcr += gpcr[i];
64     }
```

```
Main.java > Main > main(String[])
56     else if(marks[i] >= 40){
57         gp = 4;
58     }
59     else{
60         gp = 0;
61     }
62     gpcr[i] = gp * credits[i];
63     sgpcr += gpcr[i];
64 }
65 sgpa = sgpcr / (credSum + 0.0);
66 System.out.println("Student's sgpa is: " + sgpa);
67 }
68 }
69
70
71 public class Main {
72     Run | Debug
73     public static void main(String[] args){
74         Student s1 = new Student();
75
76         s1.getDetails();
77         s1.printDetails();
78         s1.sgpaClac();
79     }
80 }
81
```

```
E:\jdk8\bin\ooj lab>javac Main.java
```

```
E:\jdk8\bin\ooj lab>java Main
```

```
Enter no of subjects:
```

```
5
```

```
Enter Student usn
```

```
1BM19CS104
```

```
Enter Student name
```

```
Niranjan
```

```
Enter credits followed by marks for subject 1:
```

```
3 98
```

```
Enter credits followed by marks for subject 2:
```

```
4 96
```

```
Enter credits followed by marks for subject 3:
```

```
5 83
```

```
Enter credits followed by marks for subject 4:
```

```
4 83
```

```
Enter credits followed by marks for subject 5:
```

```
4 94
```

```
Student details are as follows:
```

```
Name: Niranjan usn: 1BM19CS104
```

```
Sub1 Marks is: 98      Credit is: 3
```

```
Sub2 Marks is: 96      Credit is: 4
```

```
Sub3 Marks is: 83      Credit is: 5
```

```
Sub4 Marks is: 83      Credit is: 4
```

```
Sub5 Marks is: 94      Credit is: 4
```

```
Student's sgpa is: 9.55
```

```
E:\jdk8\bin\ooj lab>
```