

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.

```
import java.util. Scanner;  
class Student  
{
```

```
    String name, usn;  
    int marks[] = new int [5];  
    int credits[] = new int [5];
```

```
    void input()  
{  
        Scanner ss = new Scanner (System.in);  
        System.out.println ("Enter your name:  
name = ss.nextLine ();  
        System.out.println ("Enter your usn:");  
        usn = ss.next ();  
        System.out.println ("Enter the marks  
of each subject:");
```

```
for (int i = 0; i < 5; i++)  
{
```

```
    marks[i] = ss.nextInt();
```

```
}
```

```
System.out.println("Enter the  
number of credits for each  
subject:");
```

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

```
    credits[i] = ss.nextInt();
```

```
}
```

```
void display()  
{
```

```
    System.out.println("NAME: " + name);
```

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

```
    for (int i = 0; i < 5; i++)  
    {
```

```
        System.out.println("Marks of each  
subject" + (i+1) + " = " + marks[i]);
```

```
        System.out.println("Number of  
credits for each subject" + (i+1) +  
        " = " + credits[i]);
```

```
    }
```

```
}
```

```
void calc()
```

```
{
```

```
    int gr-point[] = new int[5];
```

```
    int sgpa = 0;
```

```
    int sum = 0; float res;
```

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

```
    {
```

```
        if (marks[i] >= 90)
```

```
            gr-point[i] = 10;
```

```
        else if (marks[i] >= 80)
```

```
            gr-point[i] = 9;
```

```
        else if (marks[i] >= 70)
```

```
            gr-point[i] = 8;
```

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

```
            gr-point[i] = 7;
```

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

```
            gr-point[i] = 6;
```

```
        else if (marks[i] >= 40)
```

```
            gr-point[i] = 5;
```

```
        else if (marks[i] >= 35)
```

```
            gr-point[i] = 4;
```

```
        else if (marks[i] < 35 && marks[i] > 0)
```

```
            gr-point[i] = 0;
```

```
    } else
```

```
        System.out.println("Invalid marks");
```



```
for subject = (i+1) + " entered. Try  
again";
```

```
sgpa = (gr-point[i] * credits[i]);  
sum += (credits[i]);
```

```
}
```

```
res = (float) sgpa / sum;
```

```
System.out.println("SGPA = " + res);
```

```
}
```

```
}
```

```
class sgpa
```

```
{
```

```
public static void main (String args[])  
{
```

```
Student s1 = new Student();
```

```
s1.input();
```

```
s1.display();
```

```
s1.calc();
```

```
}
```

```
}
```

Command Prompt

Anagha k s

enter your usn:

1BM21CS021

enter the marks of each subject:

70

68

79

88

89

enter the number of credits for each subject:

6

5

6

7

7

NAME:Anagha k s

USN:1BM21CS021

marks of each subject1=70

number of credits for each subject1=6

marks of each subject2=68

number of credits for each subject2=5

marks of each subject3=79

number of credits for each subject3=6

marks of each subject4=88

number of credits for each subject4=7

marks of each subject5=89

number of credits for each subject5=7

SGPA=8.290322

C:\Users\Admin\Desktop\ooj>