

WAP 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 s = new Scanner(System.in);
        System.out.println("Enter your name:");
        name = s.nextLine();
        System.out.println("Enter your usn:");
        usn = s.next();
        usn = s.next();
        System.out.println("Enter the marks of each subject:");
        for(int i=0; i<5; i++)
        {
            marks[i] = s.nextInt();
        }
        System.out.println("Enter the no. of credits for each subject");
        for(int j=0; j<5; j++)
        {
            credits[j] = s.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 subject" + (i+1) + " = " +
                               marks[i]);
```

```
        System.out.println ("No. of credits for the subject
                               above = " + 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] >= 10)
    gr-point[i] = 5;
```

```
else if ( marks[i] < 35 && marks[i] > 0)
    gr-point[i] = 0;
```

```
else
```

```
System.out.println ("Invalid input for " + (i+1) + "subject");
```

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

```
sum += (credits credits[i]);
```

```
}
```

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

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

```
}
```

```
}
```

```
class Sgpa
```

```
{
```

```
public static void main (String arr[])
```

```
{
```

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

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

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

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

```
}
```

```
}
```

## Output

Enter your name: Aryan

Enter your usn: 1BMAICSO33

Enter the marks of each subject:

89

78

91

76

88

Enter the no. of credits for each subject:

4

3

3

3

1

Name: Aryan

USN: 1BMAICSO33

Marks of subject 1 = 89

No. of credits for the subject above = 4

Marks of subject 2 = 78

No. of credits for the subject above = 3

Marks of subject 3 = 91

No. of credits for the subject above = 3

Marks of subject 4 = 76

No. of credits for the subject above = 3

Marks of subject 5 = 88

No. of credits for the subject above = 1

SGPA = 8.785714



```
Command Prompt - java Lab3
Enter your name:
Aryan
Enter your usn:
1BM21CS033
Enter the marks of each subject:
89
78
91
76
88
Enter the no. of credits for each subject:
4
3
3
3
1
Name:Aryan
USN:1BM21CS033
Marks of subject1=89
No. of credits for the subject above=4
Marks of subject2=78
No. of credits for the subject above=3
Marks of subject3=91
No. of credits for the subject above=3
Marks of subject4=76
No. of credits for the subject above=3
Marks of subject5=88
No. of credits for the subject above=1
SGPA:8.785714
```