

QUESTION:

2/ Develop a Java program to create a class student with members User, name, an array of credits & array of marks. Include methods to accept & display details and method to calculate Sgpa of a student.

CODE:

```
class Student
{
    String user(10);
    String name(20);
    int marks[] = new int[5];
    int credits[] = new int[5];
    double result = 0; int total;
    void accept()
    {
        Scanner scan = new Scanner(System.in);
        //for user
        System.out.println("Enter user");
        user = scan.nextLine();
        System.out.println("Enter name");
        name = scan.nextLine();
        System.out.println("Enter marks");
        //for marks
        for(int i=0; i<5; i++)
        {
            marks[i] = scan.nextInt();
        }
        System.out.println("Enter credits");
        for(int i=0; i<5; i++)
        {
            credits[i] = scan.nextInt();
        }
    }
    void display()
    {
        System.out.println(user);
        System.out.println(name);
    }
}
```

OUTPUT:

```
C:\Users\dhru2\OneDrive\Desktop\1BM21CS057>javac LAB2.java
```

```
C:\Users\dhru2\OneDrive\Desktop\1BM21CS057>java sgpa
```

```
enter name and usn of the student
```

```
Dhruva 1BM21CS057
```

```
enter number of courses
```

```
5
```

```
credit of the subject1:
```

```
4
```

```
marks of the subject1:
```

```
98
```

```
credit of the subject2:
```

```
3
```

```
marks of the subject2:
```

```
90
```

```
credit of the subject3:
```

```
1
```

```
marks of the subject3:
```

```
89
```

```
credit of the subject4:
```

```
1
```

```
marks of the subject4:
```

```
88
```

```
credit of the subject5:
```

```
3
```

```
marks of the subject5:
```

```
94
```

```
usn of the student: 1BM21CS057
```

```
name of the student: Dhruva
```

```
sgpa is 9.833333333333334
```

```

for (i=0; i<5; i++)
{
    System.out.println(marks[i]);
    System.out.println(credits[i]);
}

float calc_sgpa ( )
{
    float sgpa;
    for (i=0; i<5; i++)
    {
        if (marks[i] >= 90 && marks[i] <= 100)
            result += 10 * credits[i];
        else if (marks[i] >= 80 && marks[i] < 90)
            result += 9 * credits[i];
        else if (marks[i] >= 70 && marks[i] < 80)
            result += 8 * credits[i];
        else if (marks[i] >= 60 && marks[i] < 70)
            result += 7 * credits[i];
        else if (marks[i] >= 50 && marks[i] < 60)
            result += 6 * credits[i];
        else if (marks[i] >= 40 && marks[i] < 50)
            result += 5 * credits[i];
        else
            result = 0;
    }

    for (int i=0; i<5; i++)
        total = total + credits[i];
    sgpa = result / total;
}

```

```

class Egbaz {
    psvm (String ss[])
    {
        Student s1 = new Student();
        s1.accept();
        s1.display();
        s1.calc_sgpa(); s1.calc_sgpa();
    }
}

```