

Q.1. Develop a Java Program to create of a class Student with members usn, name, an array credits & an array marks. Use methods.

```
→ import java.util.Scanner;
class Student {
    String usn;
    String name;
    int credits[];
    int marks[];
    void accept(String usn, String name, int[] credits, int[] marks)
    {
        this.usn = usn;
        this.name = name;
        this.credits = credits;
        this.marks = marks;
    }
    int calculate(int[] credits, int[] marks)
    {
        int sum1 = 0, sum2;
        for (int i = 0; i < 8; i++)
        {
            sum1 += credits[i] * marks[i];
        }
        sum2 = 20;
        System.out.println("1:" + sum1 + "2:" + sum2);
        return sum1 / sum2;
    }
    void display(float sgpa)
    {
        System.out.println("usn" + usn);
        System.out.println("name" + name);
        System.out.println("sgpa" + sgpa);
    }
}
```

class Main {

public static void main(String [] args)

{ Scanner sc = new Scanner(System.in);

System.out.println("enter size");

int size = sc.nextInt();

int[] marks = new int[size];

int[] credits = new int[size];

float res;

Student s1 = new Student();

System.out.println("enter user");

String user = sc.next();

System.out.println("enter name");

String name = sc.next();

System.out.println("enter marks considering 91-100 as  
10, 81-90 and so on");

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

marks[i] = sc.nextInt();

}

System.out.println("enter credits in sequential order");

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

credits[i] = sc.nextInt();

}

s1.accept(user, name, marks, credits)

res = s1.calculate(marks, credits)

s1.display(res);

}

}



## Algorithm :-

1. Start
2. Create class named student
3. Create <sup>required</sup> instance variables
4. Create method to accept details.
5. Create method to calculate sgpa
6. Create method to display sgpa
7. ~~Create variables size~~
8. ~~Create object student s1~~
9. ~~Load details~~
10. ~~Print the details and sgpa using methods~~
11. Stop.

## Flowchart :-

Output:

Enter size: 8

Enter your usn: ~~16PA2205017~~

Enter name: Aditya

Enter marks:

90 93 87 87 83 90 96 100

[SGPA = 9.55] <sup>enter credits</sup> 4 4 3 3 1 1 1 1

usn: 017

name: Ad

1: 12192 2: 20

Sgpa: 8.9

```
C:\Users\abdes\OneDrive\Documents\Java>javac java_code/Main.java
```

```
C:\Users\abdes\OneDrive\Documents\Java>java java_code.Main
```

```
Anagh.B.Deshpande(1BM22CS037)
```

```
enter size
```

```
8
```

```
enter usn
```

```
037
```

```
enter name
```

```
ad
```

```
enter marks considering 91-100 as 10,81-90 as 9 and so on
```

```
9 9 9 9 8 9 9 10
```

```
enter credits in sequential order
```

```
4 4 3 3 3 1 1 1
```

```
1:1782:20
```

```
usn:037
```

```
name:ad
```

```
sgpa:8.0
```