

16/10/24

classmate

Date

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LAB - 3

- Develop a Java program to create a class student with members um, name, an array credits and an array marks. Include methods to accept and display details and a method to calculate SGPA.

→ import java.util.Scanner;

```
class Student {
```

```
    String um, name;
```

```
    int m[] = new int[8];
```

```
    int c[] = new int[8];
```

```
    double g, es, tc, sgpa;
```

```
    Scanner s = new Scanner  
        (System.in);
```

```
    void details() {
```

```
        System.out.println("Enter  
um:");
```

```
        um = s.next();
```

```
        System.out.println("Enter  
name:");
```

```
        name = s.next();
```

```
        System.out.println("Enter  
marks:");
```

```
        for (int i = 0; i < 8; i++) {
```

```
            m[i] = s.nextInt();
```

```
        }  
        System.out.println("Enter  
credits for 8  
subjects:");
```

```
for (int i=0; i<8; i++) {
    c[i] = s.nextInt();
}
```

```
void display() {
    System.out.println("um: " + " " +
                        um);
    System.out.println("Name: " + " " +
                        name);
    System.out.println("Marks:");
    for (int i=0; i<8; i++) {
        System.out.println(
            "Mark " + " " +
            (i+1) + " : " +
            m[i]);
    }
}
```

```
void sgpalalc() {
```

```
    System.out.println("um: " +
                        " " + um);
```

```
    for (int i=0; i<8; i++) {
        else {
            g = (m[i]/10) + 1;
            if (m[i] == 100) {
                g = 10;
            }
            es += g * c[i];
            tc += c[i];
        }
    }
```

```
    sgpa = (double)es / (double)tc;
```

```
    System.out.println(sgpa);
}
```

```
}
```



```

class Hello {
    public static void main(String[] args) {

```

```

        Student s[] = new Student(3);
        for (int i = 0; i < 3; i++) {

```

```

            s[i] = new Student();

```

```

            for (int j = 0; j < 3; j++) {

```

```

                System.out.println

```

```

                    ("Enter details of " + " " +
                     (j + 1) +
                     " student");

```

```

                    s[j].detail();

```

```

            }

```

```

        for (int k = 0; k < 3; k++) {

```

```

            System.out.println

```

```

                ("Details of " +
                 " " + (k + 1) +
                 " student");

```

```

                s[k].display();

```

```

        for (int i = 0; i < 3; i++) {

```

```

            System.out.println

```

```

                ("SGPA of " + " " +
                 (i + 1) +
                 " student");

```

```

            s[i].sgpacalc();

```

```

        }
    }
}

```

O/P:

Enter details of 1 student :

Enter um : 1

Enter name : a

Enter marks :

98

100

99

97

96

93

92

95

Enter credits for 8 subjects :

4

4

3

3

3

1

1

1

Details of 1 student :

um : 1

Name : a

Marks :

Mark 1 : 98

Mark 2 : 100

Mark 3 : 99

Mark 4 : 97

Mark 5 : 96

Mark 6 : 93

Mark 7 : 92

Mark 8 : 95

SGPA of 1 student :

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