

### LAB-3

Date : \_\_\_\_\_

8/10/2024

- 2.) Write a 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.

Program:

```
import java.util.Scanner;
```

```
class Student
```

```
{
```

```
    String usn, name;
```

```
    int credits[], marks[];
```

```
    void acceptDetails()
```

```
{
```

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

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

```
        this.usn = sc.next();
```

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

```
        this.name = sc.next();
```

```
        credits = new int[4];
```

```
        marks = new int[4];
```

```
        System.out.println("Enter details of credits and  
marks in order of 4 Subjects: ");
```



```

for (int i=0; i < 4; i++)
{
    System.out.println("Enter credits for subjects "+
        (i+1) + " : ");
    credits[i] = sc.nextInt();
    System.out.println("Enter marks for subjects "+
        (i+1) + " : ");
    marks[i] = sc.nextInt();
}
}

```

10

```

void display()
{

```

15

```

    System.out.println("Student Details");

```

```

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

```

```

    System.out.println("Name : " + name);

```

```

    for (int i=0; i < 4; i++)
    {

```

```

        System.out.println("Subject " + (i+1) + " - credits : " +
            credits[i] + ", Marks : " + marks[i]);
    }
}

```

20

3

```

double calc()
{

```

25

```

    int totalCredits = 0;

```

```

    double totalGradePoints = 0;

```



```
for (int i = 0; i < 4; i++)
{
```

```
    total credits += credits[i];
```

```
    total grade points += grade points[i] * credits[i];
```

```
5 } return total grade points / total credits;
```

```
3 int  
main grade points (int main)
```

```
{
```

```
    If (marks >= 90); return 10;
```

```
    else if (marks >= 80); return 9;
```

```
10    else if (marks >= 70); return 8;
```

```
    else if (marks >= 60); return 7;
```

```
    else if (marks >= 50); return 6;
```

```
    else if (marks >= 40); return 5;
```

```
    else return 0;
```

```
3 }
```

```
public class SGPA ()
```

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

```
{
```

```
    Student student = new Student ();
```

```
    student.acceptDetails ();
```

```
20    System.out.println(" Student Details: ");
```

```
    student.display ();
```

```
    System.out.println(" SGPA : " + student.calc());
```

```
3 }  
3 }
```

8

8.10.24

proceed.



Student.java

X

+

C:\Windows\System32\cmd.exe

1bm23

Enter name:

dharu

Enter details of subjects and credits:

Enter credits for subject1:

2

Enter marks for subject1:

90

Enter credits for subject2:

4

Enter marks for subject2:

99

Enter credits for subject3:

4

Enter marks for subject3:

90

Enter credits for subject4:

5

Enter marks for subject4:

89

STUDENT DETAILS

USN:1bm23

NAME:dharu

Subjects1credits:2,Marks:90

Subjects2credits:4,Marks:99

Subjects3credits:4,Marks:90

Subjects4credits:5,Marks:89

SGPA:9.206666666666667

C:\Users\Admin\Downloads