

Program (2)

- Q) Develop a Java 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.

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

```
class Student {
```

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

```
    String USN;
```

```
    String Name;
```

```
    int credits[] = new int[5];
```

```
    float marks[] = new float[5];
```

```
    int points[] = new int[5];
```

```
    float SGPA;
```

```
    int totalCredits = 0;
```

```
    void inputDetails() {
```

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

```
        USN = sc.nextLine();
```

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

```
        Name = sc.nextLine();
```

```
        for(int i=0; i<5; i++)
```

```
            System.out.println("Enter Credits for Subjects " +
                                (i+1) + ":");
```



```
credits[i] = sc.nextInt();
```

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

```
System.out.println("Enter marks for subject " + (i+1)  
+ ":");
```

```
marks[i] = sc.nextFloat();
```

```
}
```

```
void outputDetails()
```

```
{
```

```
System.out.println("Student UCN:" + UCN);
```

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

```
for (int i=0; i<5; i++)
```

```
{
```

```
System.out.println("Subject " + (i+1) + " - Credits: +
```

```
(credits[i]) + " Marks: " +
```

```
(marks[i]);
```

```
}
```

```
System.out.println("SGPA of " + Name + " is: " +
```

```
(float) (SGPA/totalCredits));
```

```
}
```

```
void calc()
```

```
{
```

```
for (int i=0; i<5; i++)
```

```
{
```

```
if (marks[i] > 100)
```

```
System.out.println("ERROR! marks above 100");
```

```
return;
```

```
}
```

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```
else if (marks[i] >= 90)
```

```
{ points[i] = 10;
```

```
}
```

```
else if (marks[i] >= 80)
```

```
{ points[i] = 9;
```

```
}
```

```
else if (marks[i] >= 70)
```

```
{ points[i] = 8;
```

```
}
```

```
else if (marks[i] >= 60)
```

```
{ points[i] = 7;
```

```
}
```

```
else if (marks[i] >= 50)
```

```
{ points[i] = 5;
```

```
}
```

```
else if (marks[i] >= 40)
```

```
{ points[i] = 4;
```

```
}
```

```
else {
```

```
points[i] = 0;
```

```
}
```

```
SGPA += (points[i] + credits[i]) /
```

```
}
```

```
}
```

```
}
```

```
public class Prog2 {
```

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


2

Student stu1 = new Student();

stu1.inputdetails();

stu1.calc();

stu1.outputdetails();

}

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