Lab 4

Create a new Eclipse project named YourStudentId_OOP_Lab4 and add two classes named BMI, Triangle to the project. You must comply with the following variable names.

1. BMI calculator (Write in *BMI* class)

- Declare three double variables named *weight, height, and bmi*.
- Noted that the *height* variable is in the unit of "centimeter", but it should be turned into "meter" to calculate BMI.
- Use *Math.pow()* to calculate BMI and assign the result to the *bmi* variable.
- Round off your result to the 2nd decimal place and print out.
- Use "*If else statement*" to inform the user that he or she is underweight/normal weight/overweight based on the information as below:

  underweight: BMI < 18.5

  normal weight: 18.5 <= BMI < 24.0

  overweight: BMI >= 24
- The formula is BMI = kg/m^2.

Sample output (the green one is user input):

```
Please input the weight(kg):70
Please input the height(cm):180
Your BMI is: 21.60
The result is: normal
```

2. Equilateral triangle (Write in *Triangle* class)

Print the equilateral triangle. Please use the *for loop, print(), println()*, the symbol "*" , and space " " to show a triangle on the console. The number of "*" for each level is incremented by a tolerance of 2, and the number of printed layers entered by the user.

- Declare and initialize the int variable named *layer* = 1.
- Use Scanner object named *layerScanner* to scan the number of printed layers.
- Use for loop to print out the triangle as sample output.

Sample output (the green one is user input):

```
Please input the layer:8
        *
       ***
      *****
     *******
    *********
   ***********
  *************
***************
```

Submission: Submit your project as "zip (or rar) file" via Moodle. No other submissions will be graded.

Reminder: Please zip the whole project

Deadline: Tomorrow's midnight (for both Mon56 and Tue23)