Concordia University
COMP 248 – Fall 2018
Assignment 1

Due Date:	By 11:55pm September 28, 2018
Evaluation:	2% of final mark (see marking rubric at the end of handout)
Late Submission:	none accepted
Purpose:	The purpose of this assignment is to help you learn Java identifiers, assignments, input/output.
CEAB/CIPS Attributes:	Design/Problem analysis/Communication Skills

General Guidelines When Writing Programs:

Include the following comments at the top of your source codes

```
// -----------------------------------------------------
// Assignment (include number)
// Written by: (include your name and student id)
// For COMP 248 Section (your section) – Fall 2018
// -----------------------------------------------------
```

- In a comment, give a general explanation of what your program does. As the programming questions get more complex, the explanations will get lengthier.
- Include comments in your program describing the main steps in your program. Focus in your comments rather on the why than the how.
- Display a welcome message.
- Display clear prompts for users when you are expecting the user to enter data from the keyboard.
- All output should be displayed with clear messages and in an easy to read format.
- End your program with a closing message so that the user knows that the program has terminated.

Question 1 - Display a design (4 pts)

Write a complete Java program that prints your first name in BIG letters. If your name is John, then the program should print the following:

```
   JJJJJ          OO        HH    HH    NN         NN
    JJ        OO    OO     HH    HH     NNNN      NN
    JJ        OO      OO   HHHHHHH     NN   NNNN
JJ  JJ        OO    OO     HH    HH     NN         NN
 JJJJ             OO        HH    HH    NN         NN
```

If your name is so long like Anastasia, feel free to use a nick name that is three to five characters long.

Question 2 - BMI Calculator (8 points)

Develop a program that asks the user to enter his/her height in meters and his/her weight in kilograms and calculates the BMI index based on the following formula:

$$\text{BMI} = \frac{\text{mass(kg)}}{(\text{height(m)})^2}$$

Sample run:

```
Enter your weight in kilogram:
60
Enter height in meter:
1.6
************** BMI ****************

Your weight:              60.0
Your height:              1.6

Your BMI is:               23.437499999999996

***** Thanks for using the bestest BMI calculator ever *****
```

Submitting Assignment 1

Please check your course Moodle webpage on how to submit the assignment.

Evaluation Criteria for Assignment 1 (20 points)

Source Code	
Comments for all 3 questions (5 pts.)	
Description of the program (authors, date, purpose)	2 pts.
Description of variables and constants	1 pt.
Description of the algorithm	2 pts.
Programming Style for all 3 questions (3 pts.)	
Use of significant names for identifiers	1 pt.
Indentation and readability	1 pt.
Welcome Banner/Closing message	1 pt.
Question 1 (3 pts.)	
Display results	4 pts.
Question 2 (3 pts.)	
Prompting user	1 pt.
Reading data	2 pts.
Calculate BMI	3 pts.
Display BMI	1 Pt.
Display ending greeting	1 pt.
TOTAL	**20 pts.**