

# COMP1161 – INTRODUCTION TO OBJECT ORIENTED PROGRAMMING

## LAB 2 – USING PREDEFINED CLASSES

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Refer to:

- the String class API - <http://docs.oracle.com/javase/6/docs/api/java/lang/String.html>
- the Math class API - <http://docs.oracle.com/javase/6/docs/api/java/lang/Math.html>

Focus on the Constructor and Method Summaries.

You are expected to use the appropriate methods from the above classes in your solution below.

### Exercises

1. Create an application class (class with the main method) called Lab2.

Write the java code in main for the following requirements:

#### 2. CREATING EMAIL ADDRESS

- a. Accept the first name and last name of a student. Output the student's full name.
- b. Change the last name of the student to "Jones". Output the student's full name.
- c. Create an email address for the student using his/her first and last name joined by a dot, with the extension uwimona.edu.jm.

For example : [mary.jones@uwimona.edu.jm](mailto:mary.jones@uwimona.edu.jm)

Note that the email address must be in lower case. Output the email address.

#### 3. VALIDATING EMAIL ADDRESS

- a. Accept the email address of a UWI student. Change to lower case and remove all spaces.
- b. Determine and output if it is a valid UWI email address. A UWI email address ends with the extension - @uwimona.edu.jm and a dot(.) that comes before "@uwimona.edu.jm" must be included.
- c. Output the student's first and last name from the email address if it is valid.

#### 4. USING MATH CLASS

Given the variables a, b, c and d, declare and initialize with the values 12, 9, 10 and -14.678 respectively. Use appropriate methods from the Math class to determine the following:

Write your code in Lab2 class. Create variables as needed.

- a) Output the larger value, given c and b.
- b) Output the result of  $a^c$ .
- c) Output the absolute value of d.