

**COMP 1030**  
**Lab #2**  
**Introduction to java**

**When writing your code, keep these guidelines in mind:**

- Start each class with the proper javadoc comment header. The first line of that comment should be the purpose of the class not just its name.
  - All variable names should have meaningful names (age, speed) and follow coding conventions, do not use letter variable names.
  - Use whitespace and indentations to make your code more readable and easy to debug.
  - Use notepad and the command prompt to do your work.
  - Be sure to clearly understand your work – do not simply copy code from someone else.
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**Instructions**

In order to complete this lab, lab #1 must be successfully completed. This assignment must be completed using the DOS prompt and text pad NOT an IDE. The purpose of this class is to writing simple java statement to become accustomed to the java language.

Open notepad to create a class that will accomplish the following tasks, in the terminal window, compile your program using javac and run your program using java as per last week's instructions. Note that we are not building a class that will eventually be instantiated into an object as we are still learning the basics of java. So in today's lab we are writing some sequential java code within the main method, which is the entry point to the application.

**Challenge 1**

- Step 1 Write a class declaration called JavaCodeTester
- Step 2 Within the class declaration write the main method.
- Step 3 Within the main method write code to complete the tasks listed below, starting in step 4.
- Step 4 Store a Boolean value in a variable with an appropriate name.
- Step 5 Display the value of the variable on the computer screen.
- Step 6 Store a character in a variable with an appropriate name.
- Step 7 Display the value of the variable on the computer screen.
- Step 8 Store two string values in two different variables with appropriate names.
- Step 9 Concatenate the two strings and display the concatenated value on the computer screen.
- Step 10 Store an integer value in a variable with an appropriate name.
- Step 11 Display the value of the variable on the computer screen.
- Step 12 Store a double value in a variable with an appropriate name.
- Step 13 Display the value of the variable on the computer screen.

## Challenge 2

- Step 1 Store three String values in three different variables with appropriate names.
- Step 2 Concatenate the three Strings and store the concatenated String in a new variable with an appropriate name.
- Step 3 Display the 3<sup>rd</sup> and 5<sup>th</sup> and 7<sup>th</sup> character of the concatenated string, on the same line display an appropriate message telling the user the meaning of the character that was printed.
- Step 4 Display the Boolean value which indicates if the concatenated string from step 2 starts with the word “test”.
- Step 5 Display the concatenated string from step 2 in all upper case letters.
- Step 6 Store an integer value in a variable with an appropriate name.
- Step 6 Use the increment operator to display the value of the variable. (place the increment operator before the variable name)
- Step 7 Use the increment operator to display the value of the variable. (place the increment operator after the variable name)

## Challenge 3

- Step 1 Store an integer value in a variable with an appropriate name.
- Step 2 Determine if the integer is odd or even and use the if statement (see usage details below) to display the word “odd” if it is an odd number, and “even” if it is an even number.

```
if (condition)
{
    //block of code to be executed if the condition is true
}
else
{
    //block of code to be executed if the condition is false
}
```