# Lab 02 - Streaming, Expressions & Variables

## Part A: In class

Your objective is to write a complete C++ program. For each of the following English statements

- ☐ The number is a negative odd three digit integer.
- ☐ The three numbers are all nonzero and at least one of them has a different sign than the others.

write code that

a. declares a variable for each of the unknown values in the statement. Make sure to use acceptable data types.

b. prompts the user to provide a value(s) for the variable(s), and then, store the input(s) in the variable(s). Have a separate prompt for each variable.

c. assigns a bool variable a bool expression that represents the English statement using the variable(s) as the unknown(s).

d. displays the value of the bool variable preceded by the string `"Result:  "`. The string and bool value must be on its own line.

## Part B: Take home

Your objective is to write to write a complete C++ that

a. Prompt the user and store their inputs in acceptable variables for
   - ☐ a name (it may contain a space)
   - ☐ an adjective
   - ☐ a noun (may contain spaces)
   - ☐ a pronoun
   - ☐ a part of the body (may contain spaces)
   - ☐ a positive number

b. Display the message below in the exact format

   Please excuse *name*,
   who is far too *adjective* to attend *noun* class. Furthermore, *pronoun* is sick
   with the *part-of-the-body* flu. It will take *positive-number* days for *name* to recover.

   where *name*, *adjective*, *noun*, *pronoun*, *part-of-the-body*, and *positive-number* are the values of their respective variables from the previous step.

c. After the body of the main function, write a trace table list of the main function with the inputs

   $$("Alex\ Jane", "anxious", "chemistry", "she", "eye", 12)$$

   as a comment