

# Lab 03 - Boolean Problems & Function Definitions

Direction: Submit your typed work(s) as an upload(s) to the Labs directory of your GitHub repository or Dropbox, or in your correct Lab03 google classroom assignment. Each part should be a separate files. The files named should be "lab3A.txt" and "lab3B.cpp" respectively.

## Part A: In class

Your objective is to write the boolean expressions that are described below. Assume that the variables in the descriptions are already initialized.

- ☐ Write an expression that determines if two integers, *a* and *b*, are consecutive numbers.
- ☐ Write an expression that determines if a day, *dy*, fell on a Thursday in the month of October 2020 (the first Thursday is on the 8th).
- ☐ Write an expression that determines if an integer, *n*, is a negative four digit number.
- ☐ Write an expression that determines if a string, *wd*, equals "so" ignoring case.

## Part B: Take home

Your objective is to write a complete cpp program that defines the following functions and calls them in the main function.

- ☐ A void function named `Echo()` that takes a string parameter named *msg*. It displays *msg* three times on separate lines.
- ☐ A string function named `Name()` that takes no parameters. It prompts the user to enter their first and last name separately. Afterwards, it returns a string of their last name followed by their first name with a comma between them.
- ☐ A void function named `Swap()` that takes four double reference parameters named *a*, *b*, *c* and *d* respectively. It swaps the values of the parameters so that no parameter is equal to its original value, but all values are maintained. You can assume that the values of the parameters are distinct.