

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 an integer, x , is a multiple of both 3 and 7.
- ☐ Write an expression that determines if an integer, n , is a positive three digit number.
- ☐ Write an expression that determines if a day, dy , fell on a Monday in the month of October 2020 (the first Monday is on the 5th).
- ☐ Write an expression that determines if a string, wd , equals "no" 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 double function named `Perimeter()` that takes two double parameter named lh and wh . It returns the perimeter of a rectangle whose length and width are equal to lh and wh respectively.
- ☐ A void function named `Distance()` that takes two double parameters and a double reference parameter named a , b and r respectively. It assigns the distance between a and b to r .
- ☐ A string function named `Arrangements()` that takes three char parameters named a , b and c respectively. It returns a string of all of the three letter strings of the parameters with each arrangement separated by a space.