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 numbers, s and t, have the same sign.

☐ Write an expression that determines if an integer, n, is a negative three digit number.

☐ Write an expression that determines if a day, dy, fell on a Wednesday in the month of October 2020 (the first Wednesday is on the 7th).

☐ Write an expression that determines if a string, wd, equals `"hi"` 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.