## **Lakehead University**

## **Department of Computer Science**

# **COMP-1411 – Computer Programming 1**

## Fall 2021

# **Assignment 1 [20 Points]**

Due: September 27th, 2021, at 11:55 PM

Note: Read the document of assignment expectations from the course account on D2L.

Files (assignment) submission instructions:

- Submit the files using the link provided under 'Assignment' tab in the course account on D2L.
- The file name for the problem 1 will be convert.txt
- The file name for the problem 2 will be consumption.c
- 1. **[10 points] Conversion** Write an algorithm in pseudocode that converts a height presented in feet and inches to the height presented in meters and centimeters. The algorithm must specify the input and the output. The solution should consider the following:
  - a. Prompt the user to enter a height in feet and inches
  - b. Convert the height to meter and centimeters
  - c. Display the height in meter and centimeters
- 2. **[10 points] Fuel Consumption** A driver is driving from one city to another, and the driver's concern is the cost of the fuel consumption from one city to another. Write a program in C to determine the cost of the fuel needed to travel between two cities.

### Test Run 1:

Enter the distance between the 2 cities in kms: 312 Enter the average consumption per 100 kms: 12

Enter the fuel cost per liter in \$: 1.44

The cost to drive between the 2 cities is \$53.9136

#### Test Run 2:

Enter the distance between the 2 cities in kms: 175 Enter the average consumption per 100 kms: 9 Enter the fuel cost per liter in \$: .95

The cost to drive between the 2 cities is \$14.9625