

## **MGT 201: Winter 2023 (Homework #1)**

Due on Saturday, February 11th, 2023 (11:59pm)

## Submit the following files:

- 1. Jupyter Notebook (ipynb) file
- 2. PDF and/or HTML file that shows your code and output

When you write your program, please add applicable comments with the hashtag (#) and/or with markdown cells so the grader can follow your work.

You work for a multi-national food company that purchases oak milk from around the world, then packages them into 946 ml boxes and stores them in the company's distribution centres until they are ready to be distributed to the retail locations. When the oat milk arrives, the shipments are labelled with different units of measurements (e.g., litres, gallons, and barrels). At the end of each day, the company sums up the total volume that was received for the day and records them in litres and calculates the equivalent number of 946 ml boxes (note: 1000 ml is 1 litre).

You will write a program that allows the user to enter the volume of each shipment that was received for the day in any of these three units of measurements (e.g., litres, gallons, and barrels). When the user finishes entering the volume, your program will calculate and display the total volume received in litres and the total number of 946 ml boxes. For example, if there were 10 shipments that arrived for a particular day then the user would enter 10 different volumes. Please note that the number of shipments for a particular day can vary.

Your program should be able to check for errors (e.g., no negative volume and no negative number of shipments).

## Here's a conversion chart:

- 1 barrel = 158.987 litres (l)
- 1 litre = 1000 millilitres (ml)
- 1 gallon = 3.785 litres (I)

## Hint:

- You'll need to use loop and if statements in your solution.
- You can use the input function to allow the user to input data:
  - Please see the filename: MGT 201 Notes (120321) (Quercus) pages 4 to 5 for examples.