## Computer Science Department COMP133 (Second Semester 2020/2021)

Assignment # 2 Due Date: Thursday(29/4/2021) 11:59 PM on Ritaj Only

## Notes:

- 1. Submit your assignment (main.c File) through Ritaj only by replying on a message called Assignment 2 solution.
- 2. You should consider the same file structure mentioned below (usage.txt and charges.txt)
- 3. The assignment should be submitted on the due date, late submission will NOT be accepted for any reason.
- 4. The assignment is individual effort. Copying the assignment will be treated as a cheating attempt, which may lead to fail the course.

(Late Assignments will not be accepted for any reason)

(*Wattan Corporation*) is an Internet service provider that charges customers a flat rate of \$7.99 for up to 10 hours of connection time. Additional hours or partial hours are charged at \$1.99 each.

Write a function charges that computes the total charge for a customer based on the number of hours of connection time used in a month. The function should also calculate the average cost per hour of the time used (rounded to the nearest 0.01), so use two output parameters to send back these results.

## You should write a second function

round\_money that takes a real number as an input argument and returns as the function value the number rounded to two decimal places. Write a main function that takes data from an input file usage.txt and produces an output file charges.txt. The data file format is as follows:

Line 1: current month and year as two integers

Other lines: customer number (a five-digit number) and number of hours used

Here is a sample data file and the corresponding output file:

**Data file** usage.txt 10 2009 15362 4.2

42768 11.1

11111 9.9 **Output file** charges.txt Charges for 10/2009 15362 4.2 7.99 1.90 42768 11.1 10.18 0.92 11111 9.9 7.99 0.81