

Name: \_\_\_\_\_

Date of demonstration: \_\_\_\_\_

Marks earned: /5

**LAB 3 (Due by 10 PM on September 29)**

Maximum Points: 5, Weight: 5%

Pre-requisites: Readings assigned thus far have been completed. Notes taken during lectures have been reviewed.

To complete the lab, please follow the instructions below. Not following these instructions may result in deduction of marks.

1. To receive any credit, you need to:
  - a. Demonstrate your work during the week 5 lab; Please print this handout, write your name and date of demonstration, and bring the printout with you for demonstration;
  - b. Upload your work to eConestoga as instructed in step 2 by the deadline.
2. Once you complete this lab, add weekly status report to the Visual Studio solution folder. Compress the entire solution folder to create a file with “.zip” extension. Upload the “zip” file to the appropriate assignment folder on eConestoga. You will not receive any credit if you fail to upload this file, even if you have finished and demonstrated your work. No credit is awarded without demonstration.
3. At the top of each C file, add your name and date of program creation.
4. Any variables or functions you create must be named following “camelCase” notation. Variables must be initialized before use. In case of multiple variables, define only one variable per line.
5. Program the following in one C file with one main function:
  - a. [2.5 points] For this part, your program prompts the user for two different integers. The program prints the average value of all the even integers between the two values entered by the user. An even integer is divisible by 2. Average is calculated by dividing the sum of even integers by the total number of even integers.
  - b. [2.5 points] For this part, your program simulates the operation of a simple vending machine. The vending machine can sell soda cans. A can of soda costs \$2.5. The vending machine also returns change, if the provided money exceeds the cost of soda can. The vending machine program shows the cost of soda can and keeps prompting the user to deposit (enter the amount using keyboard) money until the sum of the all deposits equals or exceeds the price of a soda can. The program then displays the message “Enjoy” and displays the value of change if the total amount had exceeded the cost of a soda can.

Please be prepared to answer any questions during the demo. You are expected to correctly understand your programs. Any lack of understanding may result in deduction of points.