

DT211C/1 Programming Lab Test #3

Date: Thursday, February 22nd, 2018 (10.30am – 11.30am)

Requirements:

Write a program to do the following:

1. In your *main()*, display a simple menu to ask the user to choose a currency (either Euro or US Dollar). After selecting a currency, the user must enter 3 amounts into a floating-point array.
2. Write 2 functions called
 - *change_to_Euro()*
 - *change_to_Dollar()*

where both functions have 1 parameter (a floating-point array) and return a floating-point number. These functions are used to convert currencies into their equivalent amounts in either Euro or US Dollar, i.e.,

change_to_Euro() // converts US Dollars into Euro
change_to_Dollar() // converts Euro into US Dollars

where:

€1 = \$1.19
\$1 = €0.84

Also, both functions return the average of the 3 converted currency amounts.

3. In your *main()*, pass the array containing the amounts you entered (point 1 above) to either the function *change_to_Euro()* or *change_to_Dollar()*, whichever applies.
4. In the *change_to_Euro()* and *change_to_Dollar()* functions, display each original amount in the array that was passed as a parameter beside the corresponding amount in the converted currency, i.e., display the 3 original **and** the 3 converted amounts beside each other.
5. Return the average of the 3 converted currency amounts to the *main()*. Display this average in the *main()*.
6. Have your program repeat and end gracefully (i.e., the user selects an option in the menu to end the program).

Submission details:

1. Name your program: **labtest3.c**
2. Submit your program through your Programming module in Webcourses. This must be submitted on or before **11.30am today in this lab**.
3. Extra marks will be awarded for well written code (comments, indentation, whitespace, good use of brackets, etc.,).

NB - This is an individual lab test and **NOT** a group one. Any student discovered copying or communicating in any way (electronic, verbal, or otherwise) will immediately fail the lab test and reported to management in the School of Computing. Do your own work!! Please :)