CS 135 -- Lab 3

Beginning Calculator Project

The purpose of this project is create a prototype, "proof of concept", Calculator to get started on Project 1. It will be organized as follows:

Project Folders	*source code*	*Image files on Canvas*
Add_2_Numbers	Add_2_Numbers.cpp	Add_2_Numbers.gif
Get_Choice	Get_Choice_v1.cpp	Get_Choice_v1.gif

Add_2_Numbers Project

1) Create a new folder: `Desktop > code_2020-09-07`

2) Let's look at the code, and discuss what it will do: ***Add_2_Numbers.gif***

3) Create a new folder named ***Add_2_Numbers*** within `code_2020-09-07`.
   Start the EditPlus editor: `File > Open`
   Browse to: `Desktop > code_2020-09-07 > Add_2_Numbers`
   Create a new source code file named *Add_2_Numbers.cpp*.

4) Type in the code exactly as shown in the ***Add_2_Numbers.gif*** image,
   • Put in correct file header AND function header.
   • Make sure you add correct "Modification History" details.
   • Include all "Programmed by:" info shown in *pgm_template.cpp*.
   • Compile it, debug it, and run it.

Get_Choice Project

5) Create a new folder named ***Get_Choice*** within `code_2020-09-07`.
   Start the EditPlus editor: `File > Open`
   Browse to: `Desktop > code_2020-09-07 > Get_Choice`
   Create a new source code file named *Get_Choice_v1.cpp*.
   Version 1 introduces "if" statements.

6) Type in the code exactly as shown in the ***Get_Choice_v1.gif*** image,
   • Put in correct file header AND function header.
   • Make sure you add correct "Modification History" details.
   • Include all "Programmed by:" info shown in *pgm_template.cpp*.
   • Compile it, debug it, and run it.

7) Save all your code in `code_2020-09-07` Folder as a zip file, and save it to your flash drive.

Part 2

Continue work in folder: `code_2020-09-07`

From before, we should have the project folder named ***Get_Choice***
We are going to make several versions within that folder, as follows...

In EditPlus: Copy *Get_Choice_v1.cpp* to *Get_Choice_v2.cpp* using *Save as*.

`Get_Choice_v2.cpp`	Converts "if" statements to "if-then-else" statements.
`Get_Choice_v3.cpp`	Converts "if" statements to "switch", (only handles lower case, so far.)
`Get_Choice_v4.cpp`	Adds "default:" for missed cases.
`Get_Choice_v5.cpp`	Adds multi-"fall-throughs" and outputs "choice".
`Get_Choice_v6.cpp`	Uses: `tolower(choice)` (needs `<cctype>`) and goes back to "if" statements to simplify even further.

All the code for these is shown in **Lab 3** on Canvas, note "deadline".