Each exercise will build up on the one prior to it, so don't start new projects each time.

Exercise 1: Main menu

Write a basic program that has a boolean flag that marks whether the program is **done** or not. Then, create a while loop that will continue looping until the user has quit.

Within the while loop, you will display a text menu like this:

```
BANK PROGRAM
   1. Deposit funds
   2. Withdraw funds
   3. Check balance
   4. Exit
```

Get the user's input. For **exercise 1**, you only need to check whether the user chose **option 4 (exit)**. If the user chooses option 4, then set the **done** flag so that the program will exit the loop and quit the program.

Exercise 2: Balance

Update the main menu program so that you now have a **float** or **double** variable called "balance". Initialize it to 0.

If the user selects option 1, ask the user how much they'd like to deposit. Add this amount to the balance.

If the user selects option 2, ask the user how much they'd like to withdraw. Subtract this amount from the balance.

If the user selects option 3, display the value of the balance variable.

Exercise 3: Validation

Finally, we will add validation to the program.

When the user is **depositing** funds, check to make sure that they have not entered an amount less than zero (example, deposit -$10). If they entered an invalid number, give an error message and don't do the calculation.

When the user is **withdrawing** funds, check to make sure that they have enough in their account, so that their balance does not become negative. If it is an invalid transaction (withdraw – balance < 0), give an error and don't do the calculation. Also make sure to check for negative numbers.

Finally, when the user chooses the **exit** option, ask the user if they're sure. If they enter "Y" or "y", then set the **done** flag so that the while loop will stop. Otherwise, the program will continue.

Turn in

Once finished, upload your work in Desire2Learn, under **In-class Exercise 2**. I only need the **.cpp** source files. If it only allows you to upload one file, zip up your work and then submit the .zip file.