CSCI 275 Assignment #2
Due: Saturday 2/5/22
Late: Saturday 2/12/22 (10 pt penalty)
Points: 60

Task:
This program practices file input, strings, and classes.

Class:
Design a class named **Customer** to store data about a banking customer. Include data fields for string identification, string name, and double balance. Provide a default constructor, parameterized constructor, accessors and mutators. Provide a deposit function that is passed a money amount and adds it to the balance. Provide a withdrawal function that is passed a money amount and subtracts it from the balance.

Input:
Data is read from input file **customers.txt** attached to the Brightspace assignment. There is an unknown number of customers. For each customer, read the identification, name, and starting balance. It is not known how many words are used in the customer name. Next is listed an unknown number of transactions listing the date, transaction code (D for deposit and W for withdrawal) and a money amount. The end of the transaction set is indicated with sentinel "xxx".

```
117118
Janet Green
25.00
12/01/21 D 100.00
12/05/21 W 31.50
12/10/21 D 250.00
12/18/21 W 75.00
xxx
```

Output:
Produce a report similar to the one shown listing the customer data and transaction history with current balance. The customer identification is listed as XXX followed by the last three digits of the identification.

Required Programming Constructs:

1. Test the input file opened correctly and end the program with an error message if it does not open.

2. Use the **conditional operator** (___ ? ___ : ____) to report the correct word "Deposit" or "Withdrawal" in the output.

3. No global variables/objects may be used.
4. No break or continue out of loops; the loop should end when the loop test is false.

Sample output:

```
Customer: Janet Green
Identification: XXX118
Balance: 25.00
Date       Transaction    Amount    Balance
12/01/21  Deposit        100.00    125.00
12/05/21  Withdrawal     31.50     93.50
12/10/21  Deposit        250.00    343.50
12/18/21  Withdrawal     75.00     268.50
-------------------------------------------------
Customer: Haven Michael Bentley
Identification: XXX345
Balance: 126.00
Date       Transaction    Amount    Balance
12/08/21  Withdrawal     10.00     116.00
12/13/21  Withdrawal     32.00     84.00
12/10/21  Deposit        179.00    263.00
12/19/21  Deposit        50.00     313.00
12/20/21  Deposit        35.75     348.75
12/30/21  Withdrawal     67.75     281.00
-------------------------------------------------
Customer: Mary Lopez
Identification: XXX029
Balance: 250.00
Date       Transaction    Amount    Balance
12/21/21  Withdrawal     100.00    150.00
12/22/21  Withdrawal     120.00    30.00
12/24/21  Deposit        353.50    383.50
12/30/21  Withdrawal     45.75     337.75
12/31/21  Withdrawal     25.00     312.75
-------------------------------------------------
```

Submission:

Upload the class file (**Customer.h**) and the source code file (**Source.cpp**) to Brightspace. I will download and run them for testing.
Note: Code is not accepted that does not compile.

Need Help?

1. Email your question with your attached .cpp source code file. Do not attach an image or a pdf. Do not paste your code into the email body. I would like to download your code so I can test it as needed.

2.   Use the scheduling software on the left side of Brightspace to schedule a Zoom meeting with me. If you cannot make the listed times, email me a list of your free times.