CSCI 259/390
Homework 7 – Processing Files

Time Due:
Due: Nov. 18, 10:00 PM

Work to Do:
For this homework, you are to do the following:
1. Create three C++ files named (use your actual last name):
   a. lastname_hw7.cpp
   b. lastname_hw7.h
   c. lastname_hw7_main.cpp
2. In "lastname_hw7_main.cpp"
   a. You may use the provided main as the starting point
3. Your program should take 2 arguments, the first should be the filename of an account file, the second should be the filename of a transaction file.
4. The idea of this assignment is to read the account file, perform the operations in the transaction file, and the print the account information after the transactions are completed.
5. CSCI 390 Students: Print your final information either sorted by account number or account balance. CSCI 259 students may do this for +15 points.
6. You may use any combination of functions/classes/C++ tools you would like to complete the assignment.
7. The number of accounts and transactions in a file CAN AND WILL CHANGE. Your code must be able to handle any number of accounts and transactions

Account File Format:
number_of_accounts
first_name last_name account_number account_balance
first_name last_name account_number account_balance
first_name last_name account_number account_balance
first_name last_name account_number account_balance
...

Transaction File Format (W = withdraw, D = deposit):
number_of_transactions
account_number W/D amount
account_number W/D amount
account_number W/D amount
account_number W/D amount
...

Note:
• Remember to save, compile, and test often. It is much easier to write code if you compile and test it as you go instead of trying to write the whole thing at once.
• The provided code is also available on: http://turing.cs.olemiss.edu/~chhumph1/assignments/

Submission:
1. Use WinSCP to copy your program from Turing to your machine
2. Send your code (all .cpp and .h files) as an attachment to chhumph1@olemiss.edu
3. Subject of email should be: Lastname – HW 7
Example Account File:

6
Bob Sagat 100 6582.23
Courtney Humphries 99 14582.24
Sam Thompson 103 123.45
Billy Bolden 102 0.00
Houston Nutt 101 25000000
Maggie McGruber 104 100

Example Transaction File:

10
102 D 500
102 W 100
99 W 100
99 D 250
101 D 500
99 D 20000
104 W 128.93
103 D 1999.27
101 W 193.93
102 D 500
Example Output:

chumphries$ ./a.out hw7_accounts.txt hw7_transactions.txt

----- Initial Bank ---------------------------------------------

<table>
<thead>
<tr>
<th>Account</th>
<th>Name</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Bob Sagat</td>
<td>6582.23</td>
</tr>
<tr>
<td>99</td>
<td>Courtney Humphries</td>
<td>14582.24</td>
</tr>
<tr>
<td>103</td>
<td>Sam Thompson</td>
<td>123.45</td>
</tr>
<tr>
<td>102</td>
<td>Billy Bolden</td>
<td>0.00</td>
</tr>
<tr>
<td>101</td>
<td>Houston Nutt</td>
<td>25000000.00</td>
</tr>
<tr>
<td>104</td>
<td>Maggie McGruber</td>
<td>100.00</td>
</tr>
</tbody>
</table>

----- Transactions -------------------------------------------

- Depositing $500.00 to 102
- withdrawing $100.00 to 102
- withdrawing $100.00 to 99
- Depositing $250.00 to 99
- Depositing $500.00 to 101
- Depositing $20000.00 to 99
- Withdrawing $128.93 to 104
- Depositing $1999.27 to 103
- Withdrawing $193.93 to 101
- Depositing $500.00 to 102

----- Bank After Transactions ------------------------------

<table>
<thead>
<tr>
<th>Account</th>
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</thead>
<tbody>
<tr>
<td>100</td>
<td>Bob Sagat</td>
<td>6582.23</td>
</tr>
<tr>
<td>99</td>
<td>Courtney Humphries</td>
<td>34732.24</td>
</tr>
<tr>
<td>103</td>
<td>Sam Thompson</td>
<td>2122.72</td>
</tr>
<tr>
<td>102</td>
<td>Billy Bolden</td>
<td>900.00</td>
</tr>
<tr>
<td>101</td>
<td>Houston Nutt</td>
<td>25000306.07</td>
</tr>
<tr>
<td>104</td>
<td>Maggie McGruber</td>
<td>-28.93 OVERDRAWN</td>
</tr>
</tbody>
</table>

----- Bank Sorted By Account Number -------------------------

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</tr>
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<tbody>
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</table>

----- Bank Sorted By Account Balance ------------------------

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</tr>
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<tbody>
<tr>
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