

CSC 135
Assignment #8
Point value: 30

Program due: Sec 1 Mon, Oct 23
Sec 2 Tues, Oct 24

You have been given a data file that contains information about some checking accounts. The file is divided into groups of data.

Each data group consists of several lines. Each valid line will start with a code letter indicating what type of data follows. The first line of a data group will begin with the code 'b' followed by an account number (int) and a beginning balance (float). This line will be followed by 0 or more lines of transactions. A transaction may be a deposit or a check.

The code for a deposit is a 'd' followed by the amount of the deposit (float). The code for a check is a 'c' followed by the amount of the check (float). The conclusion of a data group is signaled by the end code 'e'.

All input values will be separated by at least 1 blank space.

The end of all data groups will be signaled by the quit code 'q'.

Write a C++ program that reads the data and computes an ending balance for each data group in the data file. Assume that these accounts carry a checking charge of \$0.15 per check. Note that the data file may include data lines that begin with something other than the legal codes (b, c, d, e, and q). If such a line is encountered, the remaining contents of that line should be ignored (use `cin.ignore`).

For each account processed, the program should print the following with labels

1. the account number and beginning balance
2. the ending balance BEFORE check charges
3. a message indicating how many checks were processed and the total check charge
4. the final ending balance (including check charges)

Separate the output for each account with at least one blank line. Print all dollar amounts with dollar signs and 2 digits to the right of the decimal. Right justify the dollar amounts.

When all account information has been printed, print a message indicating how many bad data lines were found in the file.

This program is to be run in batch mode. There are two data files to test your program. Copy `~lee/csc135fall00/hw8data1` and `~lee/csc135fall00/hw8data2` to your account.

NOTE: You are guaranteed that each data group will start with a b transaction and conclude with an e transaction. A q will be present to terminate the input portion of the data. See back page for sample data and output.

SUGGESTION: Try to develop an algorithm for reading and processing one account, then expand to process the entire file.