Homework 12: Checkbook Balancing

CH12 #7: Write a checkbook balancing program. This program will help the user keep track of their outgoing checks and allow the user to know the difference between what their bank account displays their account balance as and what it will be when all of their outgoing checks are cashed.

The program will read in, from the console, the following for all checks that were not recorded as of the last time the checkbook was balanced:

- The number of each check (int)

- The amount of the check (Money)

- Whether or not it has been cashed (1 or 0, boolean in the array)

The check amount will be of type Money (as defined on page 662 in the book; Display 11.9), so, you will have a class used within a class. *Copy the Money class from the cpp file included on Brightspace into your program*. The Check class should have accessor and mutator functions as well as constructors and functions for both input and output of a check. In your program, store the user input checks in an array with the Check class as the type.

In addition to reading in checks, the program should also act as a bank account. The program will take in the old account balance (read this in from the user at the console; cin) and read in all new deposits (from the console; cin). You may want another array to hold the deposits.*This can all be done in main/functions and doesn't need to be another class*.

The program should output:

- Two lists of checks: the checks cashed since the last time you balanced your checkbook, the checks still not cashed. As well as the sum of the uncashed checks and the sum of the cashed checks. *Extra Credit: if you can, display both lists of checks in sorted order from lowest to highest check number.*

- The total of the deposits

- The new account balance according to the bank (Old balance + all deposits - cashed checks)

- What the actual new balance should be when all of the uncashed checks are cashed (New bank account balance - uncashed checks)

- Amount the actual balance differs from what the bank says the new balance is