CS150 Assignment 2

Bank Fees

Date assigned: Monday, September 21, 2015
Program due: Monday, September 28, 2015, 1:00pm (25 points)

A bank charges $10 per month plus the following check fees for a commercial checking account:

- $.10 each for fewer than 20 checks
- $.08 each for 20-39 checks
- $.06 each for 40 checks or more

The bank also charges an extra $15 if the balance of the account falls below $400 (before any check fees are applied).

Write a complete C++ program that asks for the beginning balance and the number of checks written. Compute and display the new balance and the bank's service fees for the month.

Sample Output:

```
************************
*      Bank Fees       *
************************

What is the initial bank balance: $550

What is the number of checks: 50

Your new balance is: $537.00
Your fees this month were: $13.00

Press any key to continue . . .
```

Input Validation: Do not accept a negative value for the number of checks written or the initial bank balance. If a negative value is given in either of those cases, then just exit the program.

```
************************
*      Bank Fees       *
************************

What is the initial bank balance: $553.34

What is the number of checks: -6
Press any key to continue . . .
```

Notes

1. Your program is not to contain any magic constants.
2. You can only use a single-alternative if for decision making in your solution. You can use more than one if, but only single-alternative.

3. The banks balance and fees must be displayed to 2 decimal places.

To complete this assignment you must submit the following:

1. **An electronic copy of your program on grace**
    a. Add a new project named 02_BankFees to your previously created assignment solution called PUNetIDAssignments. It is *vital* that you name your project correctly!
    b. Type your program (fully documented/commented) into the project. The comment block at the top of the program needs to contain your name, the date the assignment is due, the class name, assignment number and name, and a brief description of the program.
    c. Pay attention to the example output! Your program's output must look **exactly** like the example output! The spacing and newlines in your output must match exactly.
    d. Your program must use if statements and constants.
    e. Make sure that your program compiles and runs correctly. If you get any errors (or warnings), double check that you typed everything correctly. Be aware that C++ is case-sensitive.
    f. Once you are sure that the program works correctly it is time to submit your program. You do this by logging on to grace and placing your complete solution folder in the **CS150-01 Drop** folder. This solution folder must contain two projects: 01_Fraction and 02_BankFees.
    g. The program must be in the drop folder by 1:00pm on the day that it is due. Anything submitted after that will be considered late.
2. **A hard copy of your program**
    a. The hard copy must be placed on the instructor's desk by 1:00pm on the day that it is due.
    b. The hard copy must be printed in color, double-sided, and stapled in the upper-left corner if necessary. I do not bring a stapler to class.
    c. The hard copy must display line numbers, all tabs must be set to 2 spaces, and variable names must be meaningful and in lower camel case.

Good luck! And remember, if you have any problems, come and see straight away. ☺

The printers in Marsh are slow. Do NOT expect to be able to print your code 10 minutes before class!