BCS 230 Lab1

CRN 23798, 23322, 20108 Spring 2015

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Objective: To review file input/output
To review functions, reference parameters and value parameters
To review control structure

Task:

1. Create a txt file named "`lab1data.txt`" that contains any three integers, for example, 3, 7, and -2. Place the file in the same directory as your lab1 source file.

2. In the function `main`, open the above file, read three numbers and store them in three variables `a, b, c` of type `int`. Output the numbers on the screen.

3. Write the definition of a function called `checkOrder` that takes three parameters of type `int`. The function returns `true` if three integers are in order; otherwise, returns `false`. For example, `checkOrder(1, 2, 3)`, `checkOrder(1, 2, 2)`, or `checkOrder(3, 2, 1)` returns `true`, while `checkOrder(1, 3, 2)` or `checkOrder(2, 1, 3)` returns `false`. In function `main`, test your function `checkOrder` using values stored in variables `a, b,` and `c`.

4. Write the definition of the function `funcOne` that prompts the user to input an integer. The function then changes the value of `a` by adding the user input value to the value of `c,` and changes the value of `b` by subtracting the user input value from the value of `c`. Test your function in function `main`.

Note, File Input/Output is a five-step process:

1) Include header file `fstream` in the program `#include <fstream>`
2) Declare a file stream variable e.g., `ifstream infile;`
3) Open input file e.g., `infile.open("lab1data.txt");`
4) Read from file e.g., `infile >> a;`
5) Close file e.g., `infile.close();`