

## CSCD 240

### Lab 12

#### SPECIFICATIONS

- I have provided an **unchangeable** cscd240Lab12.c file.
- In Lab 11 you wrote the stock structure, the fillArray function, the menu function, and the printArray function. You will need those for this lab.
  - Take your fileUtils.h and fileUtils.c and place them in the utils folder
  - Copy lab11.c and rename it lab12.c
  - Change your #include from “lab11.h” to “lab12.h”
  - Don’t forget to change the #ifndef and #define in your lab12.h to LAB12\_H
  - Delete the symbolsSort, namesSort and pricesSort headers.
  - Add the function code for compareSymbols, compareNames, and comparePrices
    - Each will return an int
    - Each will take two parameters const void \* one, const void \* two
    - Think of each one of these as a Comparator compare method from Java

We are reusing a good portion of our code from lab 11. It is all about function pointers and the built in qsort function. man qsort for more information. Output is still the same

#### TO TURN IN

Submit a zip file of your Lab12 folder containing

- Your C files and H file(s)
- My Makefile
- Your input file(s)
- Include an output captures from running your program named cscd240lab12out.txt.

Your zip will be named your last name first letter of your first name lab12.zip (Example: steinerslab12.zip)

### SAMPLE RUN

Please choose from the following

- 1) Sort by Symbol
- 2) Sort by Company Name
- 3) Sort by Price
- 4) Quit

Choice --> 1

Google - GOOG - 721.110000  
Hillenbrand Inc - HI - 30.650000  
Microsoft - MSFT - 53.240000  
Charles Schwab - SCHW - 31.370000

Please choose from the following

- 1) Sort by Symbol
- 2) Sort by Company Name
- 3) Sort by Price
- 4) Quit

Choice --> 2

Charles Schwab - SCHW - 31.370000  
Google - GOOG - 721.110000  
Hillenbrand Inc - HI - 30.650000  
Microsoft - MSFT - 53.240000

Please choose from the following

- 1) Sort by Symbol
- 2) Sort by Company Name
- 3) Sort by Price
- 4) Quit

Choice --> 3

Hillenbrand Inc - HI - 30.650000  
Charles Schwab - SCHW - 31.370000  
Microsoft - MSFT - 53.240000  
Google - GOOG - 721.110000

Please choose from the following

- 1) Sort by Symbol
- 2) Sort by Company Name
- 3) Sort by Price
- 4) Quit

Choice --> 4

all done