HW 5: due 2/19;

Complete the C++ Books Collection demo package example discussed in class. Specifically, you need to provide the implementation for the following methods in books.cpp

Book BookCollection::FindBook(int id)

bool BookCollection::DeleteBook(int id)

You can find the code for this package in lecture9_examples.tar.gz tarball which is available on lecture course page here: https://mwcorley79.github.io/MikeCorley/lecture9/lecture9_examples.tar.gz.

Note: If you open Firefox from within the Linux Mint VM you can download the tarball directly into the VM. Otherwise you can download the code from your host machine and drag it into a folder in the VM.
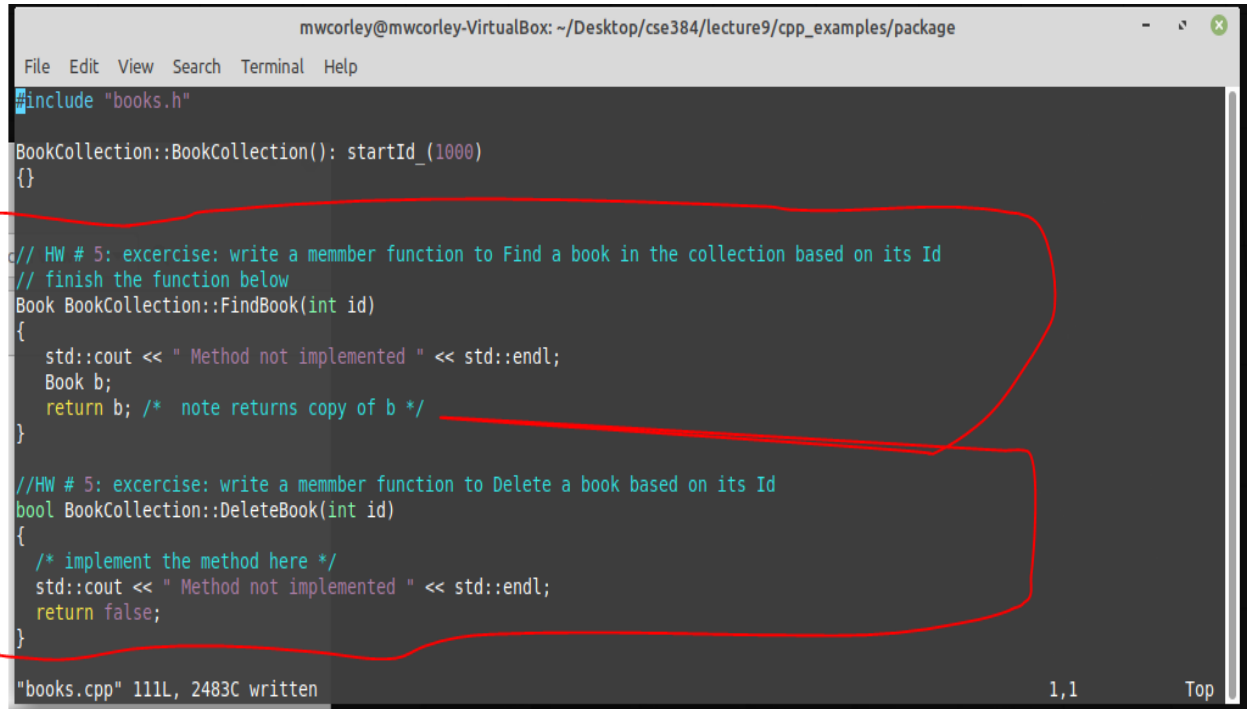
Once the lecture9_examples.tar.gz is downloaded to a folder in your VM you can extract the code with the following command: tar xvfz lecture9_examples.tar.gz.   See screen shot below:

```
mwcorley@mwcorley-VirtualBox:~/Desktop$ mkdir hw5
mwcorley@mwcorley-VirtualBox:~/Desktop$ cd hw5
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5$ ls
lecture9_examples.tar.gz
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5$ tar xvfz lecture9_examples.tar.gz
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5$
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5$ ls
lecture9  lecture9_examples.tar.gz
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5$ cd lecture9/
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5/lecture9$ ls
c_examples  cpp_examples
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5/lecture9$ cd cpp_examples/
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5/lecture9/cpp_examples$ ls
misc  package  PointersAndReferencesDemo  process  STL-Containers  string
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5/lecture9/cpp_examples/package$ g++ -o bookDemo executive.cpp books.cpp
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5/lecture9/cpp_examples/package$ ./bookDemo


A - Add a Book
L - List Books
R - Read from file
F - Find a Book by Id
D - Delete a Book by Id
Q - Quit
Enter Choice: ->
```

Use nano or vi to open books.cpp and supply the code for the methods shown

Note: you can install a g++ compiler with the following command: *sudo apt-get install g++*

```
File  Edit  View  Search  Terminal  Help
#include "books.h"

BookCollection::BookCollection(): startId_(1000)
{}


// HW # 5: excercise: write a memmber function to Find a book in the collection based on its Id
// finish the function below
Book BookCollection::FindBook(int id)
{
   std::cout << " Method not implemented " << std::endl;
   Book b;
   return b; /*  note returns copy of b */
}

//HW # 5: excercise: write a memmber function to Delete a book based on its Id
bool BookCollection::DeleteBook(int id)
{
   /* implement the method here */
   std::cout << " Method not implemented " << std::endl;
   return false;
}
"books.cpp" 111L, 2483C written                                          1,1           Top
```

Once complete, please submit your code and output screen shots to Blackboard.

If you feel ambitious, I recommend you complete the same exercise for the C package examples located in "lecture9/c_examples/package", but this not a requirement for HW5

TAs will be available in class next week to help and to answer general C/C++ questions. Take the time next week to experiment and study the code examples.

Example run

File   Edit   View   Search   Terminal   Help

```
Q - Quit
Enter Choice: -> qq
mwcorley@mwcorley-VirtualBox:~/Desktop/hw5/lecture9/cpp_examples/package$ ./bookDemo

A - Add a Book
L - List Books
R - Read from file
F - Find a Book by Id
D - Delete a Book by Id
Q - Quit
Enter Choice: -> a
Enter Author Full Name: mike corley
Enter Book Title     : my first book
Enter Copyright (year): 2005
Enter Rating (1-10)   : 10
Is Book available?    : Y
Success, Collection contains: 1 books

A - Add a Book
L - List Books
R - Read from file
F - Find a Book by Id
D - Delete a Book by Id
Q - Quit
Enter Choice: -> d
Enter the Id of the Book to delete: 222
 Method not implemented
 *** Book id: *** 222 not found in the collection

A - Add a Book
L - List Books
R - Read from file
F - Find a Book by Id
D - Delete a Book by Id
Q - Quit
Enter Choice: -> l

The collection list is:
BookId    : 1000
Author    : mike corley
Title     : my first book
copyright: 2005
rating    : 10
Available

A - Add a Book
L - List Books
R - Read from file
F - Find a Book by Id
D - Delete a Book by Id
Q - Quit
Enter Choice: -> d
Enter the Id of the Book to delete: 1000
 Method not implemented
 *** Book id: *** 1000 not found in the collection
```