

Due: Thursday, March 9, 2017, 11:59:59 Midnight

Introduction

Today's lab is designed to give you practice using some of the C++ skills with writing classes and using vectors. You practice declaring a vector of objects, writing data to a vector, accessing data from a vector, and printing data from a vector.

Lab Objectives

- Practice using c++ style input/output (cin/cout)
- Practice working with multiple files

Prior to Lab

- Review the notes we have gone over the last several days.
- Review zyBook sections on vectors

Instructions

1. I will provide you with a **Date.h** class declaration.
2. Implement the class in **Date.cpp**.
3. Write a driver, called **driver.cpp**, that will declare a vector of type Date.
4. I will provide a file called **dateInput.txt** that will contain first the number of dates provided in the file then a list of dates.
5. Create 2 file pointers and open them
 - a. An input file
 - b. An output file
6. Read the first number and then the dates that follow, storing them in the vector of Dates.
7. Once you have the dates stored in the vector you need to find the oldest birthdate listed and print that date to the output file.

TESTING

To test the program first compile the program: `g++ driver.cpp Date.cpp -o driver`

To run the program:

`./driver dateInput.txt outPut.txt`

Your program should output the oldest date in the following format:

January 1, 1900

Note that the class declaration has the input month as an **int**. **This means you will need to convert the int to a string prior to printing the output.**

FORMATTING

1. Your program should be well documented
2. Each file should include a header (example below)
3. Your program should consist of proper and consistent indentation Ex. You should choose a specific number of spaces to indent – 3, 4, or 5 – and be consistent
4. No lines of code should be more than 80 characters
5. Variable names should be meaningful

5 – 10 points will be deducted for each of the above formatting infractions. Below is an example of a program that meets each of the above formatting requirements:

```
/******  
your name  
username  
Lab 4  
Lab Section:  
Name of TA  
*****/
```

Submission Instructions

Use handin (<http://handin.cs.clemson.edu>) to submit a tarred file called Lab8.tar.gz containing driver.cpp, Date.cpp, Date.h