Lab 4

A Date Class

Introduction

The goal of this exercise is to implement a small class of your own to keep track of dates. The data should be stored in private member variables, and access to the data should be made through public member functions. You should implement the following features:

- a constructor with no arguments, which will initialize the date to be January 1, 2020

- a constructor with three short integer arguments specifying year, month and day, respectively

- a destructor

- three functions to separately set the year, month and day

- three functions to separately get the year, month and day

- a function to obtain the date as a character string of the form mm/dd/yyyy

Your constructors and destructor should all have a trace statement. A test program **TestDate.cpp** is provided.

You will also reimplement your class using inline code and default arguments for the constructor.

Suggested Time: 30 minutes.

Exercise 1

1. Examine the code in the test program **TestDate.cpp**.

2. Create a file **Date.h** to specify your class **Date**. You should have three private **short** data members to hold the year, month and day, and a **char** buffer[20] to hold the formatted date. You will all provide all public member functions to implement the features described above. Provide a single constructor with default formal arguments for the year, month, and day.

3. Create a file **Date.cpp** containing the code for the **Date** class.

Build and run the program. Compare with the solution provided.