## New Concept Assignment (NC) #25

## **Start Assignment**

**Due** Saturday by 11:59pm **Points** 2 **Submitting** a text entry box or a file upload **Available** Apr 23 at 12am - Apr 30 at 11:59pm 8 days

C++ Project Name: NC25\_Month

Implement a class named **Month** that contains information about a calendar month (name and number). The **Month** class has the following member variables (a.k.a. fields):

The name of the month (e.g. January)

The number of the month (e.g. 1)

The Month class will have member functions to:

Create a new Month(given a name and number) [parameterized constructor]

Create a new Month (given no parameters - initialize name="January", number=1) [default constructor]

getName

getNumber

setName

setNumber

operator++ member function to increment the Month by 1. For example, January (1) => February (2). If the month > 12, set the month back to January.

operator-- member function to decrement the Month by 1. For example, February (2) => January

(1). If the month < 1, set the month back to December.

operator== member function to check if one Month is the same as another by comparing all member variables

operator= member function to assign all the member variables of this Month to all the member variables of another Month

Friend Function:

operator<< friend function to turn a Month into a string for display, e.g. display as "Month [January (1)]"

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## After you complete the class, please create a main function that:

- 1. Creates a Month m1 with "December" and 12 (use parameterized constructor)
- 2. Creates a Month m2 with "January" and 1 (use default constructor)
- 3. Displays both months to the console
- 4. Uses == to determine equality
- 5. Prefix increment m1 while displaying to console
- 6. Prefix decrement m2 while displaying to console
- 7. Uses == to determine equality
- 8. Assigns m1 = m2
- 9. Displays both months to the console
- 10. Uses == to determine equality

When you're finished, please upload each C++ file (\*.cpp & .h files) and screenshot (\*.jpg or \*.png files) here on Canvas.

Please be sure to follow the CS 150 Code and Algorithm Style Sheet for full credit.

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