CPP 程式設計題

命題者：ZZY

題目名稱(中文/英文)：Design Month Class

主要測試觀念：

Basics	Functions
■ C++ BASICS 1	☐ SEPARATE COMPILATION AND NAMESPACES
☐ FLOW OF CONTROL	☐ STREAMS AND FILE I/O
■ FUNCTION BASICS	☐ RECURSION
☐ PARAMETERS AND OVERLOADING	☐ INHERITANCE
☐ ARRAYS	☐ POLYMORPHISM AND VIRTUAL FUNCTIONS
■ STRUCTURES AND CLASSES	☐ TEMPLATES
■ CONSTRUCTORS AND OTHER TOOLS	☐ LINKED DATA STRUCTURES
☐ OPERATOR OVERLOADING, FRIENDS, AND REFERENCES	☐ EXCEPTION HANDLING
☐ STRINGS	☐ STANDARD TEMPLATE LIBRARY
☐ POINTERS AND DYNAMIC ARRAYS	☐ PATTERNS AND UML

題目說明： Define a class called Month that is an abstract data type for a month. Your class will have one member variable of type int to represent a month (1 for January, 2 for February, and so forth). Include all the following member functions: a constructor to set the month using the first three letters in the name of the month as three arguments, a constructor to set the month using an integer as an argument (1 for January, 2 for February, and so forth), a default constructor, an input function name inputInt that reads the month as an integer, an input function name inputFirstThreeLetters that reads the month as the first three letters in the name of the month, an output function name outputInt that output the month as an integer, an output function name outputFirstThreeLetters that outputs the month as the first three letters in the name of the month, and a member function name nextMonth that returns the next month as a value of type Month. Embed your class definition in a test program.
Note that if month out of range, set the month to January.

輸入說明： Replace the main from input-main.cpp and enter the test data in input.txt。

輸出說明： See the Sample Output。

IO 範例 ：

	Sample Input	Sample Output
第一組測資與輸出	input-main1.cpp input1.txt	Month1 = 1 Jan Month2 = 2 Feb Month3 = 3 Mar Month4 = 4 Apr Month5 = 5 May Month6 = 6 Jun

第二組	input-main2.cpp input2.txt	Month1 = 1 Jan Month2 = 2 Feb Month3 = 1 Jan Month4 = 3 Mar Month5 = 1 Jan Month6 = 12 Dec Month7 = 10 Oct Month8 = 1 Jan Month8 = 2 Feb Month8 = 3 Mar Month8 = 4 Apr Month8 = 5 May Month8 = 6 Jun Month8 = 7 Jul Month8 = 8 Aug Month8 = 9 Sep Month8 = 10 Oct Month8 = 11 Nov Month8 = 12 Dec Month8 = 1 Jan

附屬資料：
☑解答程式：DesignMonthClass.cpp(檔名)
☑測試資料：input-main1.cpp, input1.txt, output1.txt, input-main2.cpp, input2.txt, output2.txt

■ 易，僅需用到基礎程式設計語法與結構
□中，需用到多項程式設計語法與結構
□難，需用到多項程式結構或較為複雜之資料型態或結構

解題時間：30 分鐘。

其他註記：