

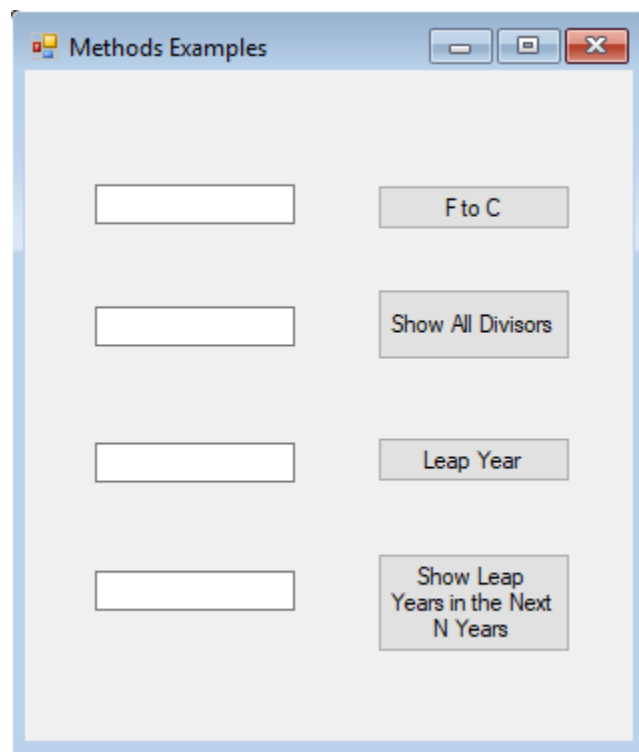
CIS 366 Introduction to .NET Development using C# (Spring 2019)

Assignment 6

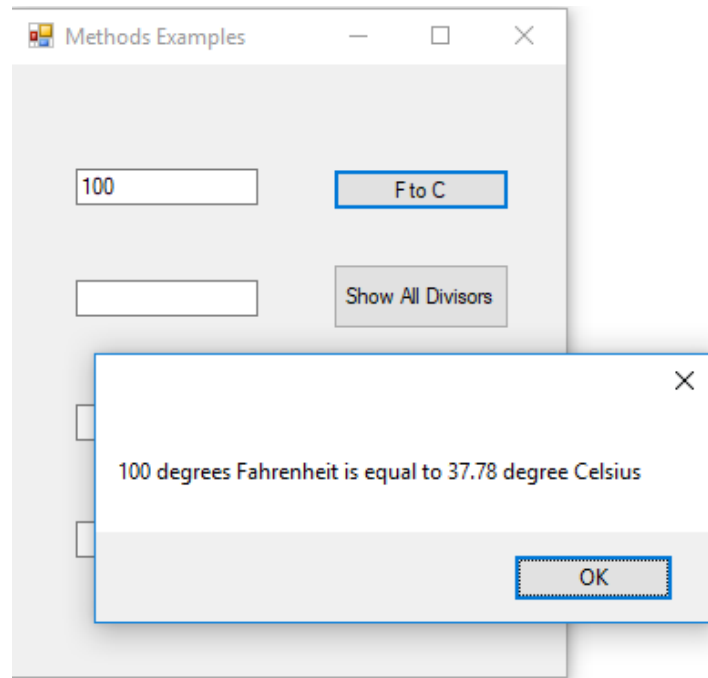
Requirement

This assignment is to design a windows application to perform some utility functions. You will practice designing methods and calling them to perform certain tasks. In this assignment, you will use Visual Studio 2015 and write C# code for following functionalities:

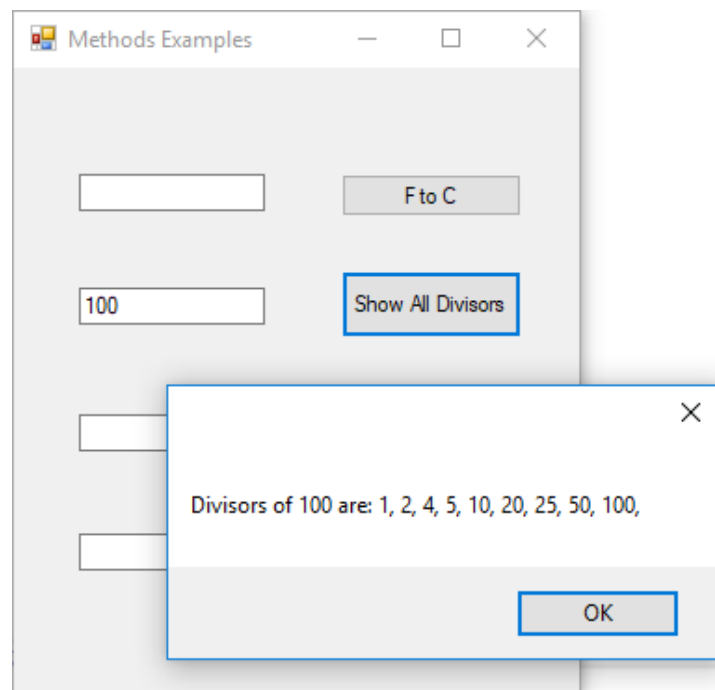
1. Build a user interface that looks like this. It allows users to enter the input for each function.



2. When "F to C" button is clicked, the input of degrees in Fahrenheit will be converted to degrees in Celsius. Here is the formula for this conversion: $C = (F - 32) * 5 / 9$. Design a function to calculate the degree in Celsius based on the input of F. Then in the main function, call this function to show a message box like this:

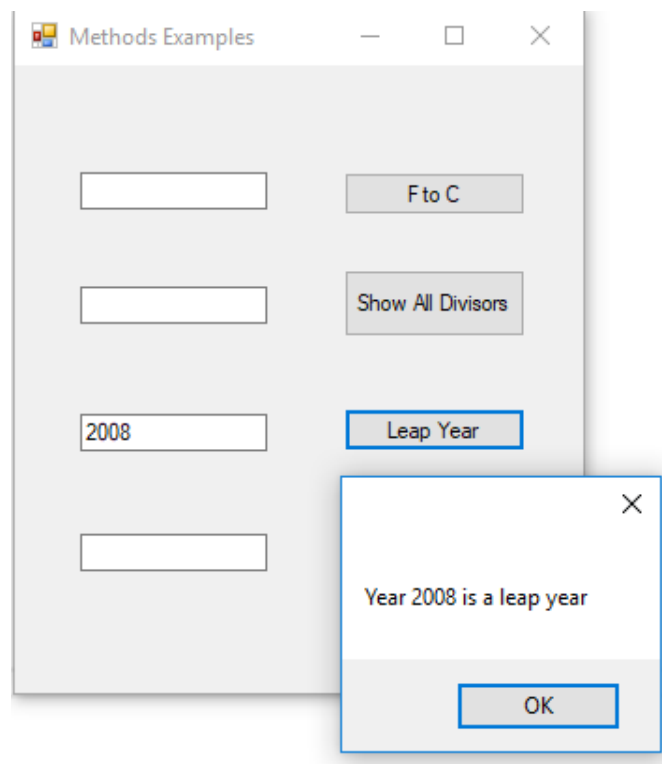


- When "Show All Divisors" button is clicked, the program will find out all divisors of the input number starting from 1. Design a function to find out all divisors and return them as string. Then in the main function, call this function to show a message box like this:

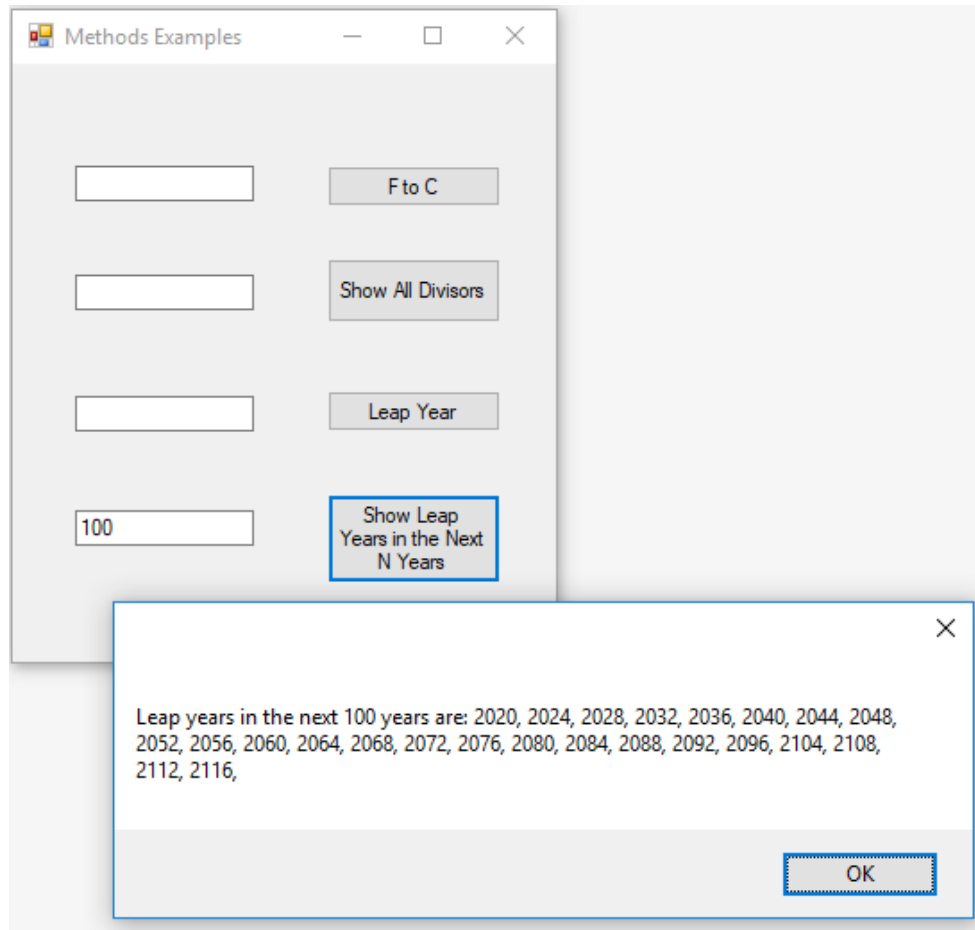


4. When “Leap Year” button is clicked, the program will test if the input of year is a leap year. Here is the rule of leap year:
- if a year is not divisible by 4, then it is a common year;
 - if a year is divisible by 4 but not divisible by 100, then it is a leap year;
 - if a year is divisible by 4 and divisible by 100 but not divisible by 400, then it is a common year;
 - if a year is divisible by 4 and divisible by 100 and divisible by 400, then it is a leap year.

Design a function to decide if a year is a leap year or a common year and return true if it is a leap year. Then in the main function, call this function to show a message box like this:



5. When “Show Leap Years in the Next N Years” button is clicked, the program will find out all leap years in the next N years starting from 2017, where N is the user input. Design a function to find out all leap years and return them as string. Then in the main function, call this function to show a message box like this:



Submission

Zip your ENTIRE project folder and name your zipped file to (yourlastname)_a6. Submit your zipped file to the Blackboard dropbox as an attachment.