**Leap**

In Practice Mode

Introduction

Given a year, report if it is a leap year.

The tricky thing here is that a leap year in the Gregorian calendar occurs:

on every year that is evenly divisible by 4

except every year that is evenly divisible by 100

unless the year is also evenly divisible by 400

For example, 1997 is not a leap year, but 1996 is. 1900 is not a leap year, but 2000 is.

If your language provides a method in the standard library that does this look-up, pretend it doesn't exist and implement it yourself.

Notes

Though our exercise adopts some very simple rules, there is more to learn!

For a delightful, four minute explanation of the whole leap year phenomenon, go watch [this youtube video](http://www.youtube.com/watch?v=xX96xng7sAE).

Getting Started

Make sure you have read the "Guides" section of the [C track](https://exercism.io/my/tracks/c) on the Exercism site. This covers the basic information on setting up the development environment expected by the exercises.

Passing the Tests

Get the first test compiling, linking and passing by following the [three rules of test-driven development](http://butunclebob.com/ArticleS.UncleBob.TheThreeRulesOfTdd).

The included makefile can be used to create and run the tests using the test task.

make test

Create just the functions you need to satisfy any compiler errors and get the test to fail. Then write just enough code to get the test to pass. Once you've done that, move onto the next test.

As you progress through the tests, take the time to refactor your implementation for readability and expressiveness and then go on to the next test.

Try to use standard C99 facilities in preference to writing your own low-level algorithms or facilities by hand.