

BDSA Assignment0

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1 IsLeapYear

The ‘IsLeapYear‘ function is very simplistic in nature. As much as I wanted to flex my competitive programming muscles, and make it a one-liner function, I decided against it for the sake of readability.

As a base, the function returns false, meaning that leap-year-iness must be shown. Adding code in front of that base case, results in a function in accordance with the diagram in Figure 1.

Since this function applies exclusively to the Gregorian calendar, it'll throw an error for years before it's inception. Additionally, on account of the year 0 being fictional, the function also throws an error, should it receive such an input.

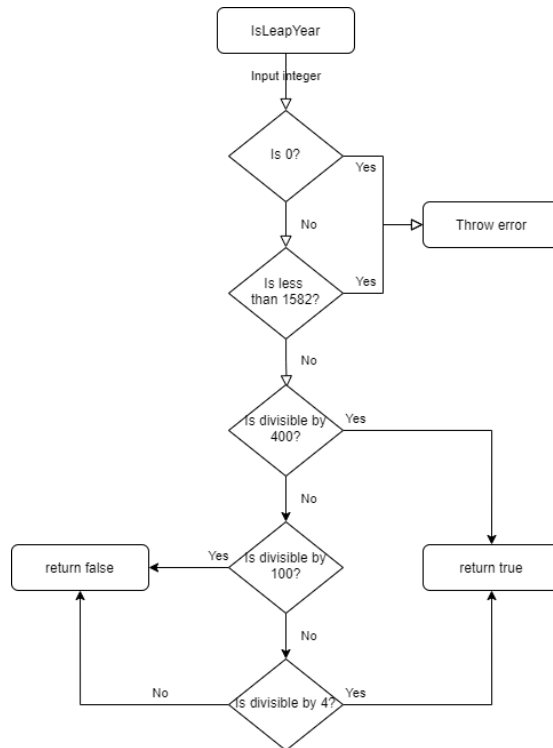


Figure 1: The IsLeapYear Diagram.

2 Interactive Console

The Interactive Console function is an uncomplicated way for a user to interface with the IsLeapYear function through the console. It'll

take a number as an input and output "yay" or "nay" depending on the leap-year-iness of the corresponding year.

Should the user fail, in the very simple task of supplying a number to the function, it will also catch any potential error `IsLeapYear` might throw. It will then tell the user about the error of their ways, in hopes that they will reconsider their lifestyle of wanton destruction, and general disregard for program safety. It is of course in vain, since if there's one thing a software engineer knows, it's that end-users never learn; stubbornly remaining in ignorance til the of time.