A Leap Year? Yay or Nay

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1 The code explained

At the start of the program, the 'main' method runs. Here the method *ValidateLeapYear()* is called. However, it does not run immediately, as its argument is given in the form of user input via *Console.ReadLine()*.

When the user input is given, the code block in *ValidateLeapYear()* runs. here, the user input string is checked for being a number or not. This is done via a try-catch block, as the conversion from string to integer throws an exception if the given string does not take the form of a correct integer. If this happens, the code of the try block is stopped, and instead the catch block run, where an error message is printed. However, if the string in fact can be converted into an integer, the number is then checked for being below the lowest allowed value of 1582. If the number is below, an exception is thrown, which in turn causes the try block to be stopped, and the catch block with the error message is run.

Only now, the *IsLeapYear()* method is called. This one checks if the number matches that of a leap year, and if so, writes *yay* in the console. If not, *nay* is written.

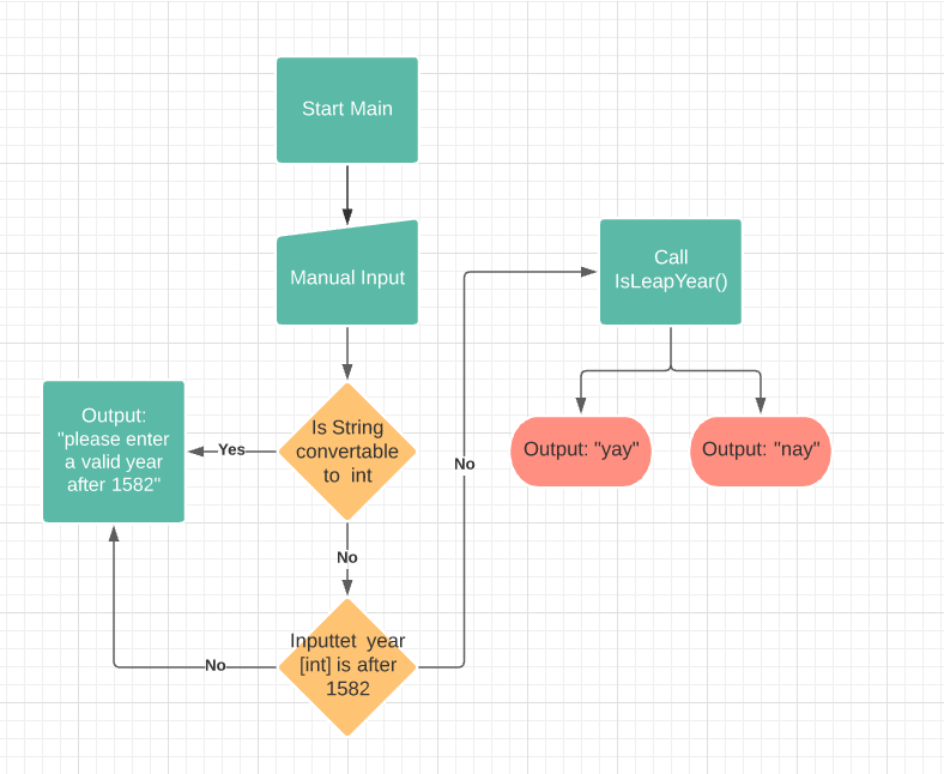

Figure 1: A diagram of the flow of the algorithm