

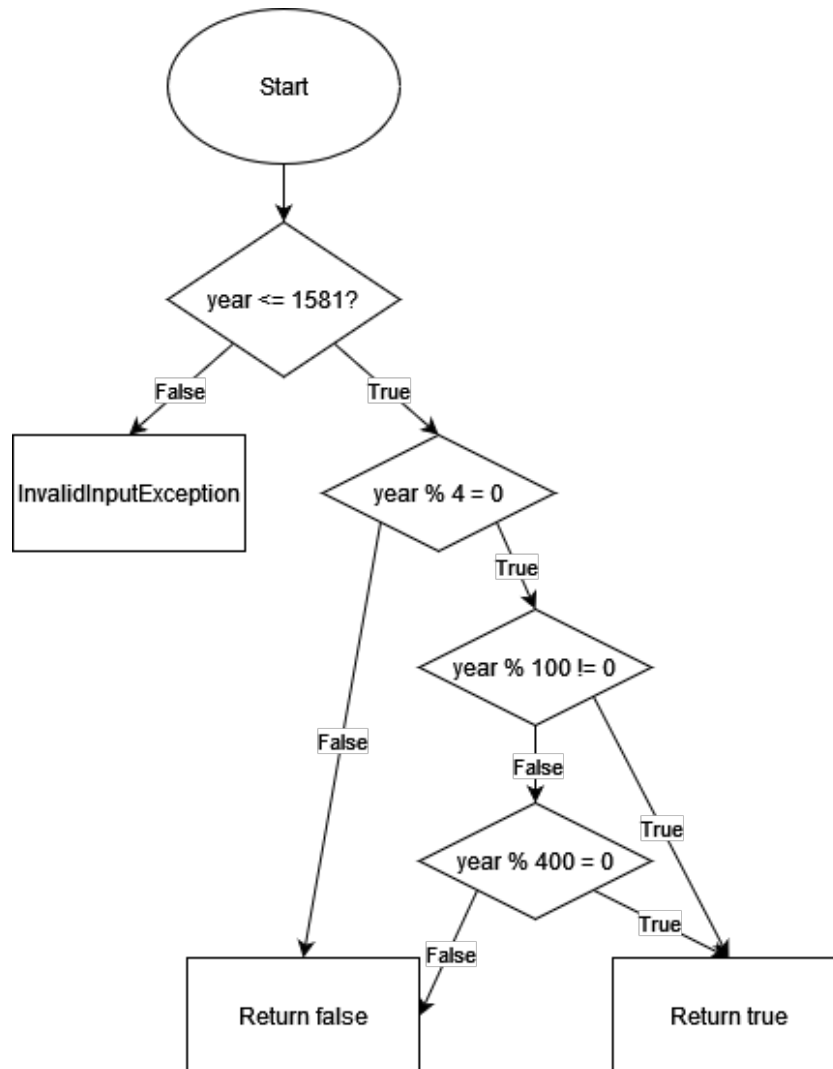
Assignment 0 diagram

Nikoline Burman (nibu)

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IsGapYear() Diagram

Below is included the diagram depicting the algorithm behind the IsGapYear-function:



The method takes an integer called 'year' as input. It is checked whether this year is less than the limit for valid integers, 1581. If the provided year is less than this number, the custom exception InvalidInputException is thrown.

Next, it is checked whether the year has a remainder of 0 when divided by 4. If not, the method immediately returns false. Otherwise, it is then checked whether the remainder is not zero when the year is divided by 100. If the remainder is not zero, the function immediately returns true. The or-operator is used, so if the former condition turns out to be false, it is then checked if the year has a remainder of 0 when divided by 400. If this is false, the method returns false. If it is true, it returns true, regardless of the result of the previous condition.