BDSA Assignment 0

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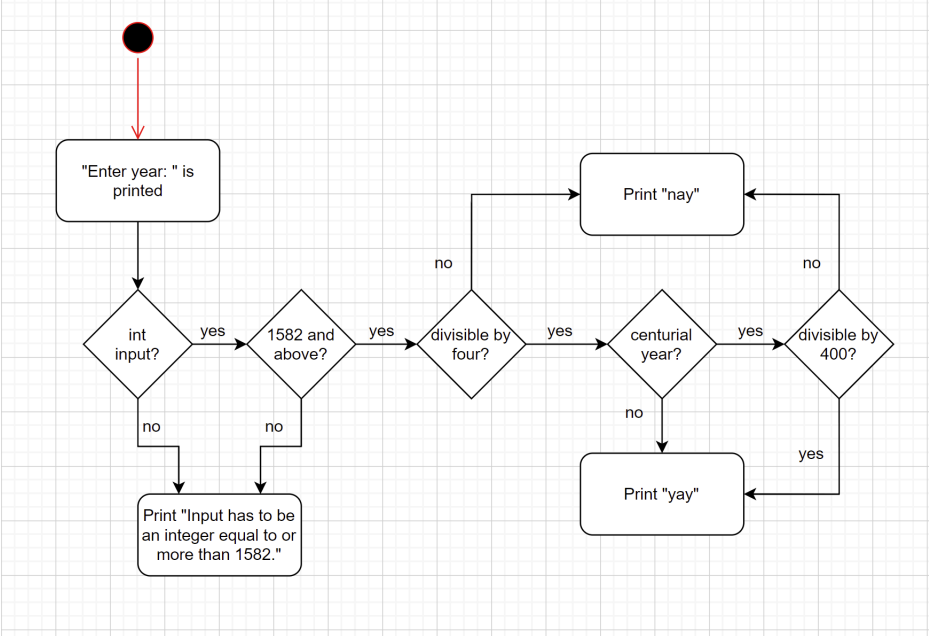
1 Diagram



Figur 1: *Visualization of the algorithm used*

The first thing that happens when the program is run is that the user is prompted to type an input with the message "Enter year: ". If the user correctly manages to input a year, that is, types only the number of a year, and nothing else, the input will be accepted first time around. However, if the input is something that can not simply be converted to an integer, the user will be met with a message telling them to give a proper input: "Input has to be an integer equal to or more than 1582.". If the input typed is indeed an integer, but is smaller than 1582, the same message will be printed. When an integer equal to or larger than 1582 is inputted, this integer will then be judged. First of all, it is checked whether the integer is divisible by four, if it is not, the judgement will end, and "nay" will be printed, since it will not be a leap year. If it is divisible by four, it is then checked whether it is a centurial year or not. If it is not, the integer will be a leap year and "yay" will be printed. However, if it is, the integer will then proceed to the next check, to see if it is divisible by 400. Centurial years divisible by 400 are leap years, and therefore "yay" will be printed if the check passes. If it does not pass, the integer will not be a leap year, and "nay" wil be printed.

Code and more can be found at: https://github.com/Gogthegog/BDSAAssignment0