Code Nation

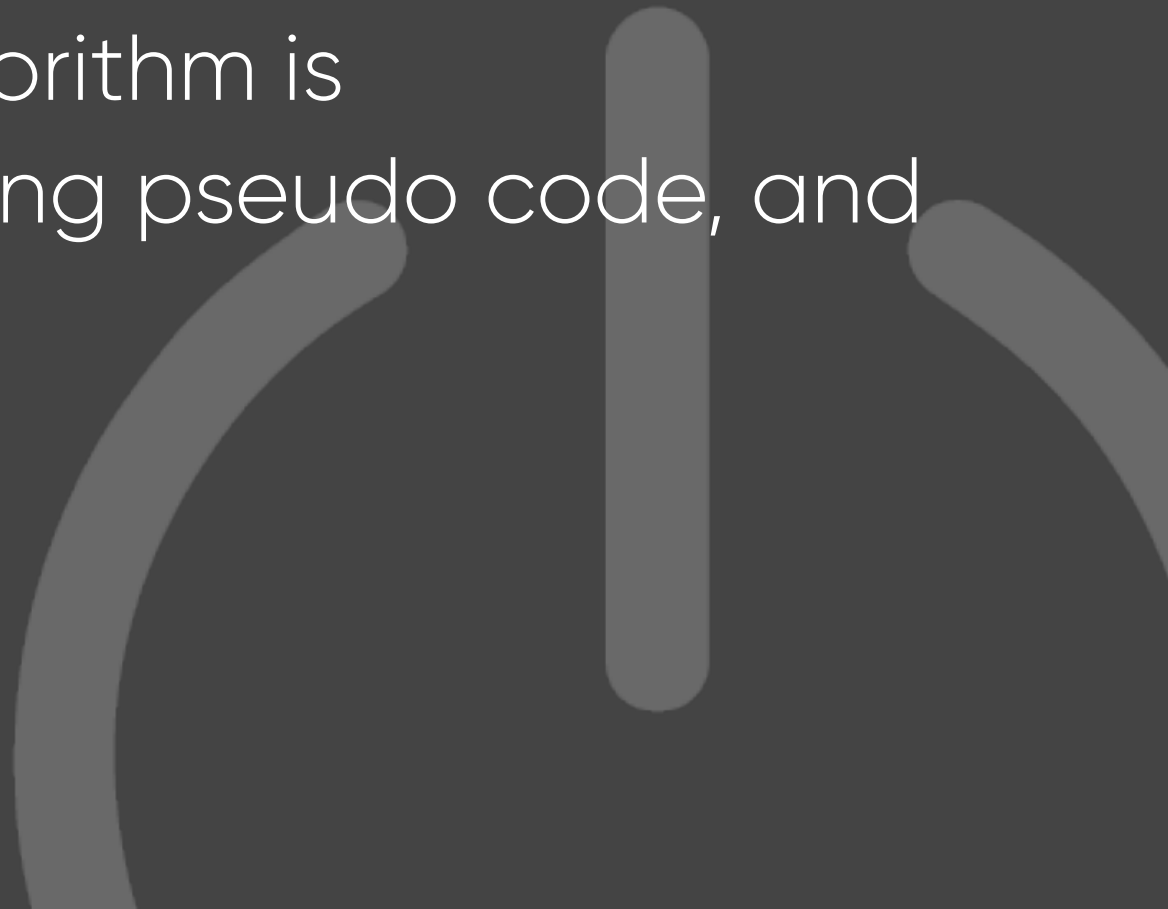
JavaScript++

Zeller's Algorithm

{codenation}®

Learning objectives

- To understand what flow diagram and pseudo code are
- To understand what an algorithm is
- To write an algorithm by using pseudo code, and flow diagrams as outlines



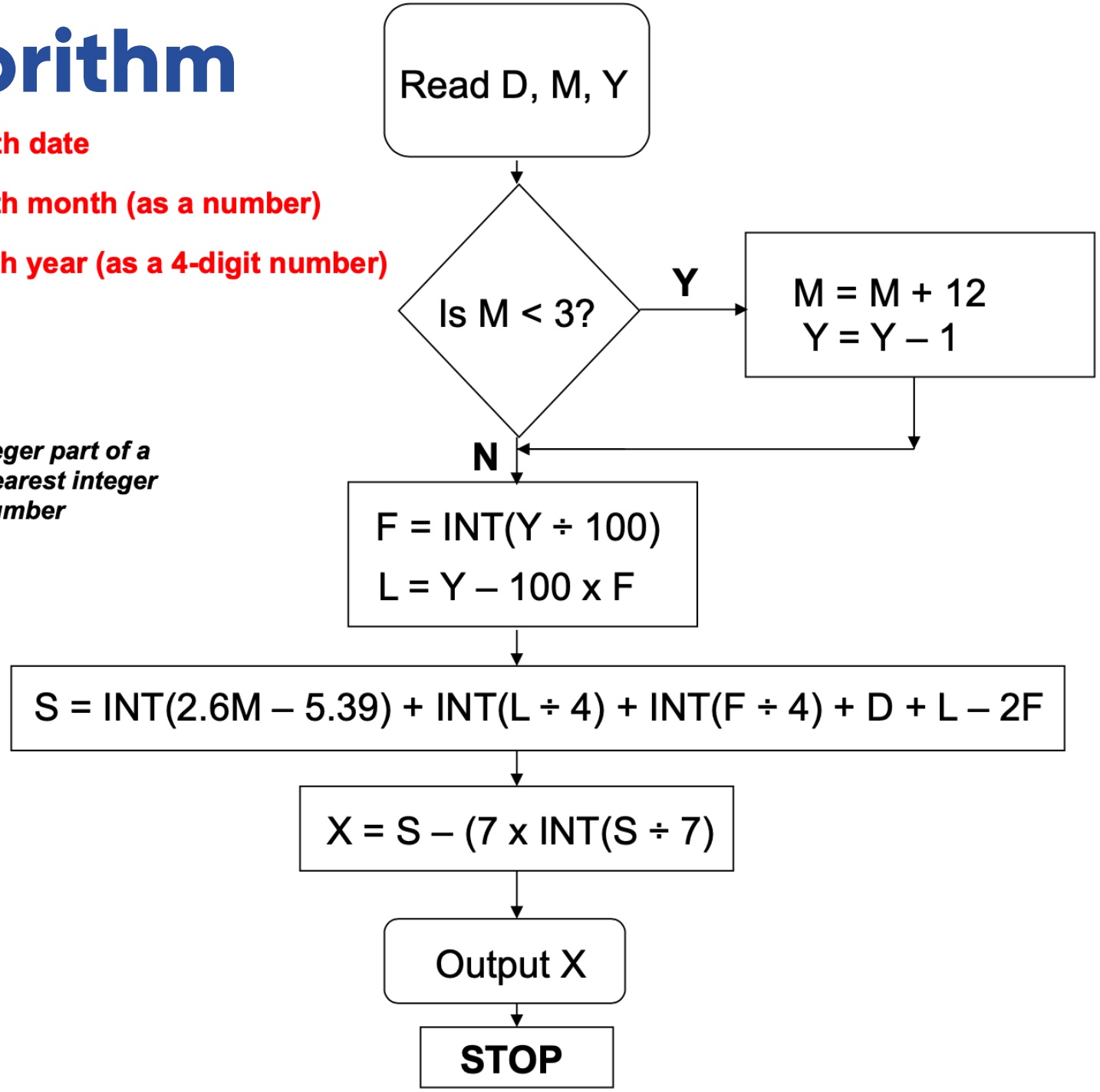
Flow diagrams.

Zeller's algorithm

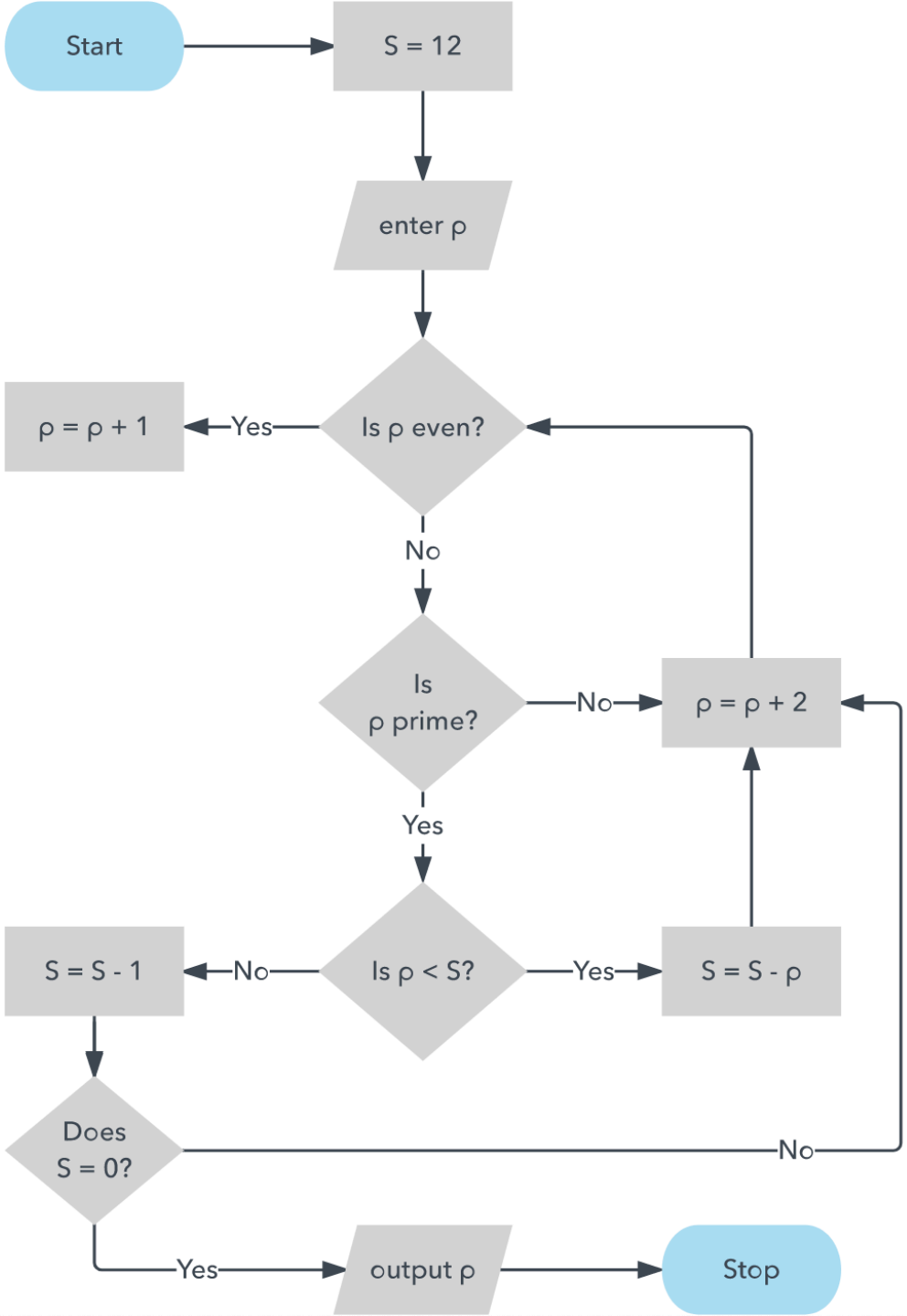
D = birth date

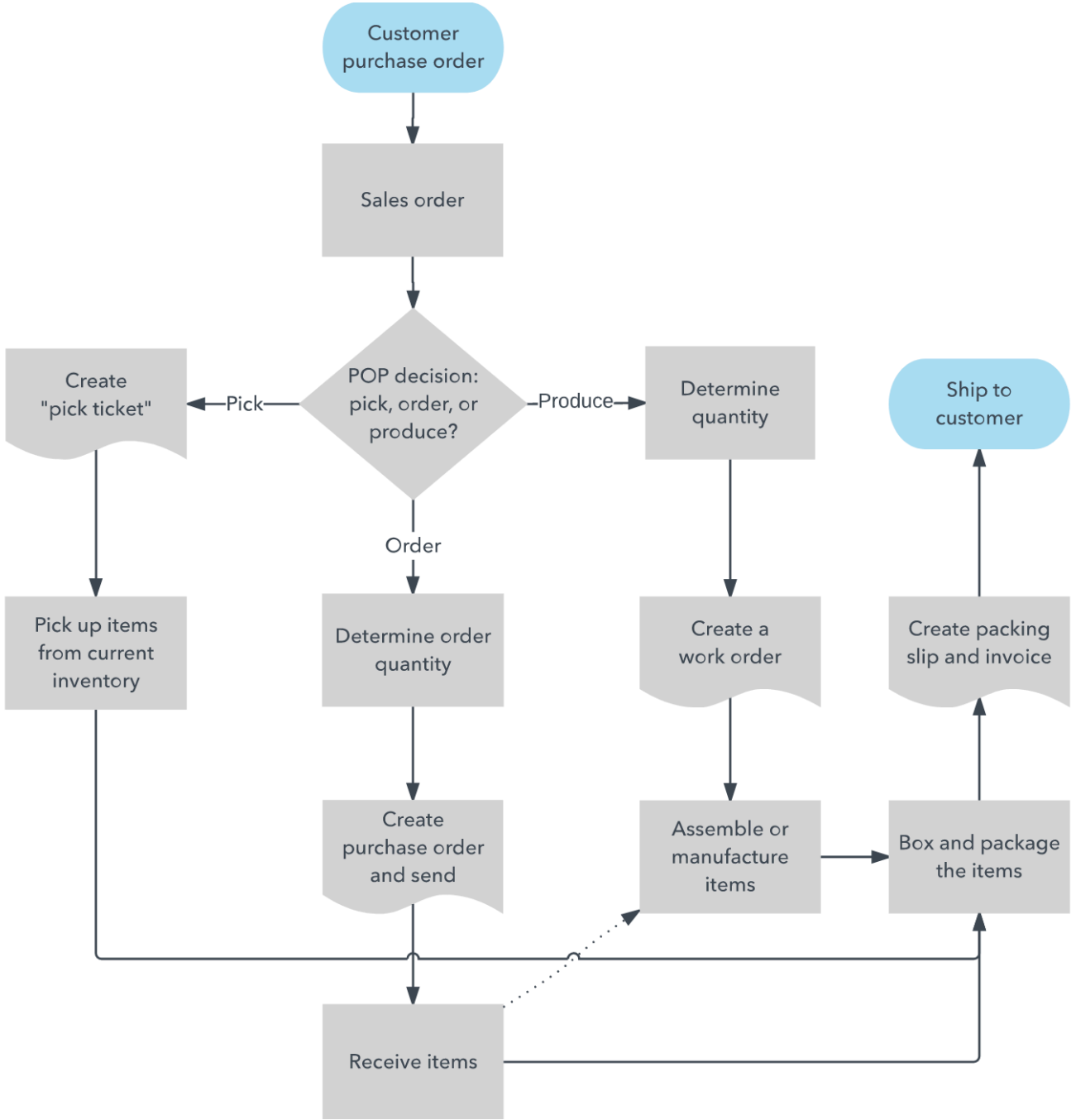
M = birth month (as a number)

Y = birth year (as a 4-digit number)



***Note:** INT = integer part of a number, the nearest integer BELOW that number*





https://www.lucidchart.com/pages/what-is-a-flowchart-tutorial

Flowchart Symbol	Name	Description
	Process symbol	Also known as an “Action Symbol,” this shape represents a process, action, or function. It’s the most widely-used symbol in flowcharting.
	Start/End symbol	Also known as the “Terminator Symbol,” this symbol represents the start points, end points, and potential outcomes of a path. Often contains “Start” or “End” within the shape.

https://www.lucidchart.com/pages/flowchart-symbols-meaning-explained

Document symbol

Represents the input or output of a document, specifically. Examples of and input are receiving a report, email, or order. Examples of an output using a document symbol include generating a presentation, memo, or letter.

Decision symbol

Indicates a question to be answered — usually yes/no or true/false. The flowchart path may then split off into different branches depending on the answer or consequences thereafter.

https://www.lucidchart.com/pages/flowchart-symbols-meaning-explained

Pseudo code.

Pseudocode:

Step by step written outline of your code to describe how an algorithm should work then convert these to the language of your choice

Zeller's algorithm

D = birth date

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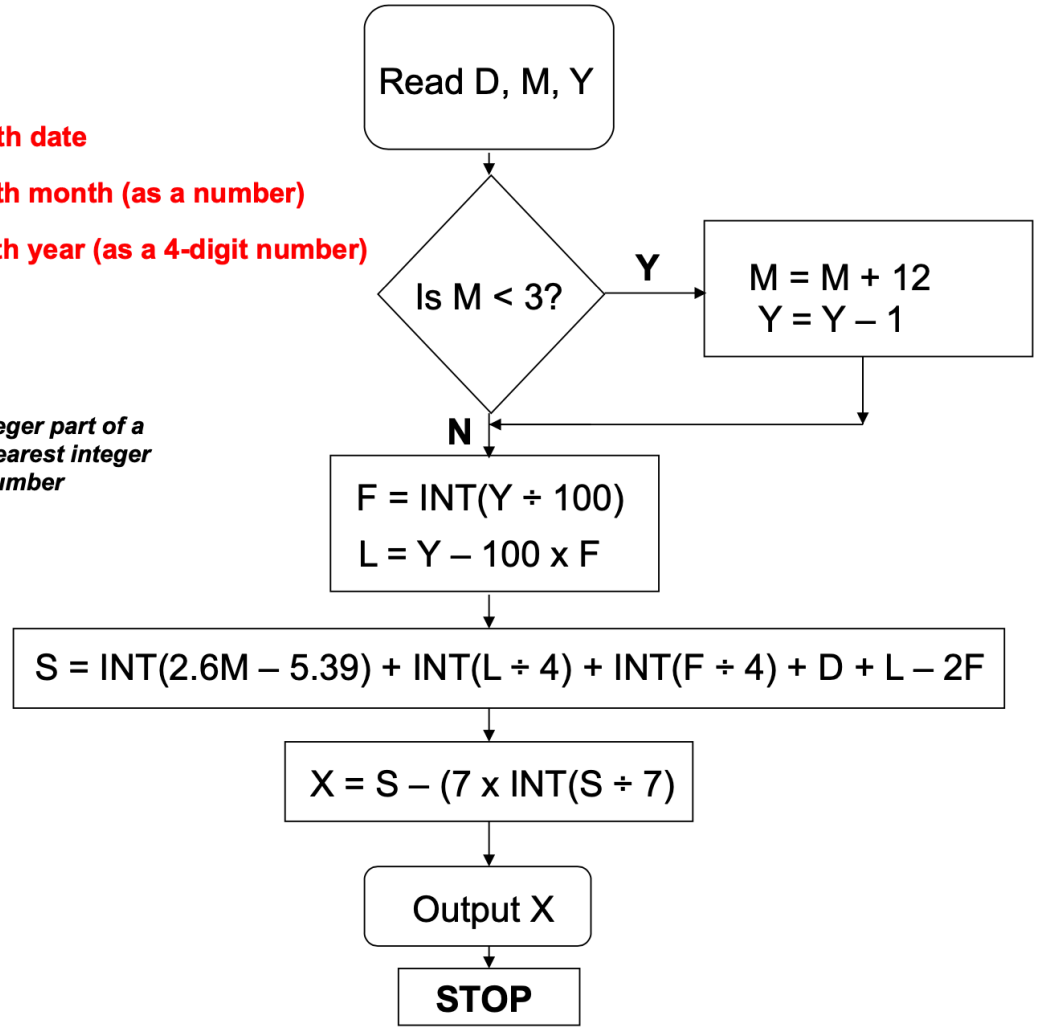

Note: INT = integer part of a number, the nearest integer BELOW that number

Pseudo Code

Input D, M, Y
Set variables Y, F, L, S, X

If M < 3
    Calculate M = M + 12
    Calculate Y = Y – 1

Calculate F = INT(Y/100)
Calculate L = Y – 100 * F

Calculate S = INT(...) + INT(...) + ...

Calculate X = ...

Output X


Let's write Zeller's algorithm.

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