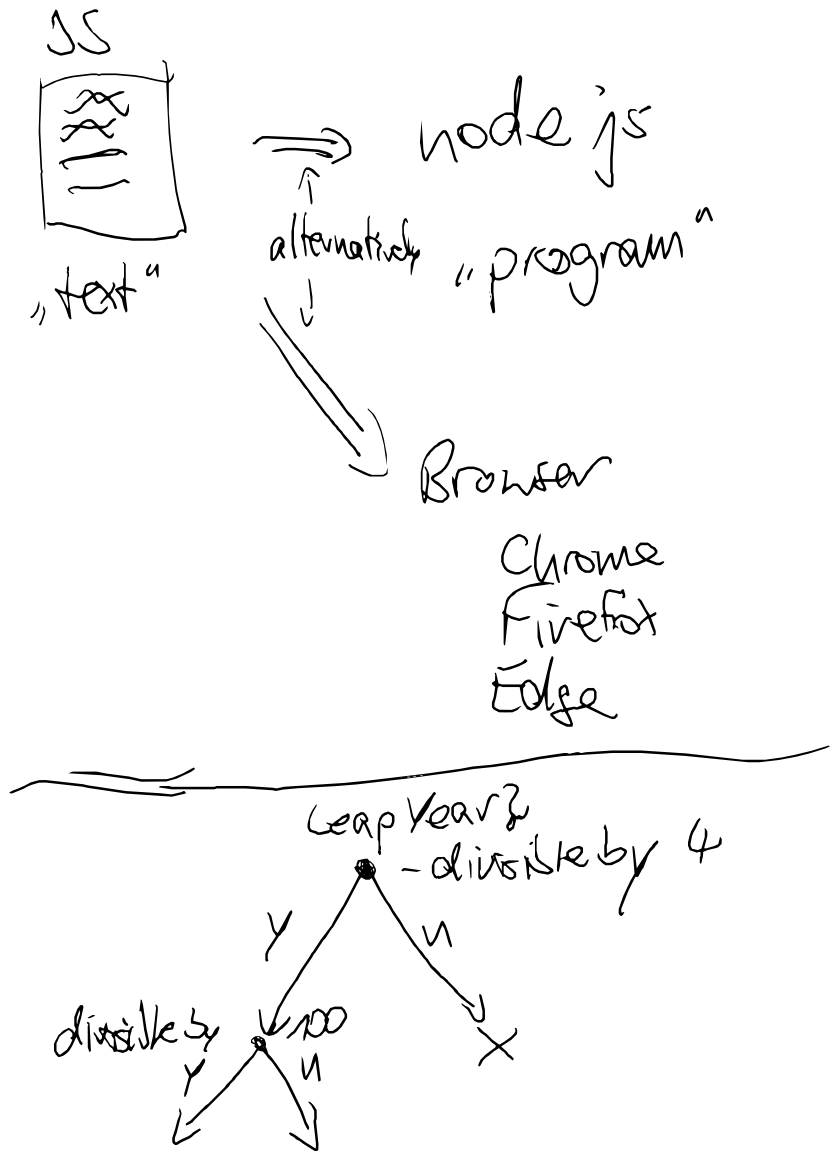
Scribbles for HCS L2C

2024-03-06



Parameter

Math.floor(6.5)

↳ 6 (round it down)

Math.random()

↳ 0.1121

I get a value

qzfh3972

use the value as parameter

Math.floor( )

"Hello" + " World!"

Concatenated: „Hello World!"

„Lengt is:" + 6

Exercise: „Dice Throw"

Solution

1. Get a random number between 0 ... 1

2. Get a random number between 0 ... 6

3. Make it an Integer between 1 and 6.

2024-03-08

data types

- numbers
  (JS doesn't differentiate fractional and „whole" numbers)
  ↳ floating ↳ integers
- strings (text)
- boolean (true / false)
- undefined & null
  ↳ „Empty"
- complex data types: Array (list) & Object (key-value-pair)
- function

node

„a program to run/execute JavaScript"

↳ Interpreter

Terminal / Shell

→ part of your Operating System

→ this can run other programs

↳ e.g. node

↳ pwd / print working directory

↳ ls / list files

↳ cd / change directory

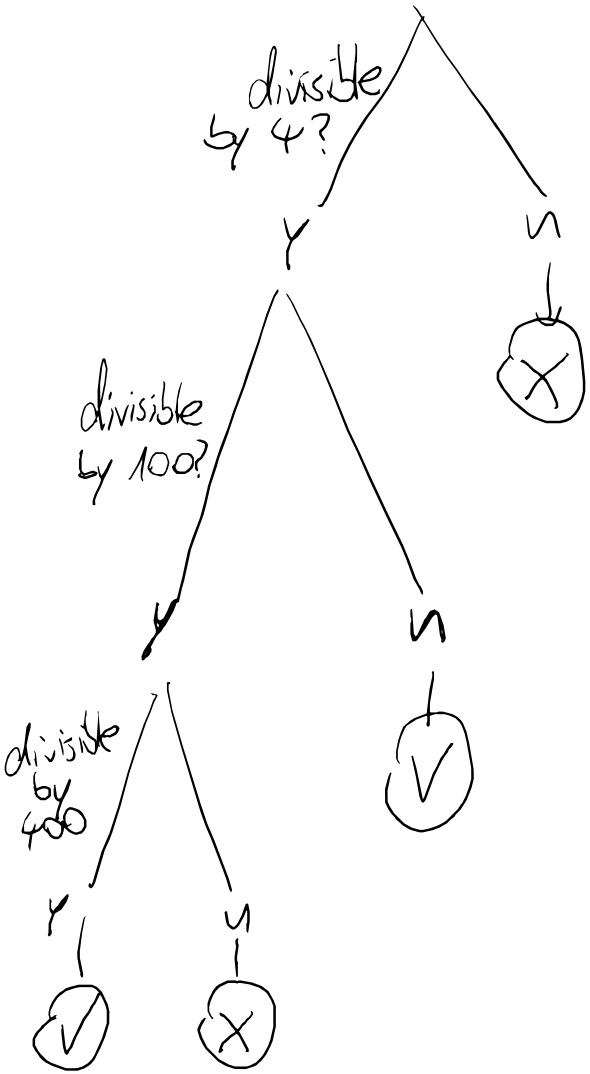
⇒ For now, always use „Open in integrated Terminal" when you're stuck.

Variables

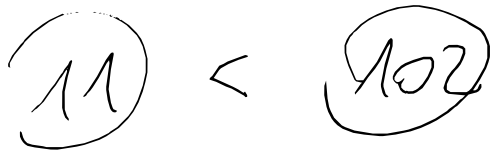
to define a variable
there are three keywords:

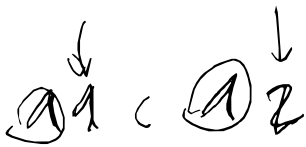
- let
- const
- var

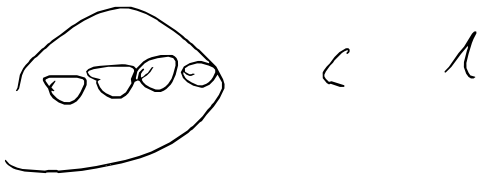
Leap Year Calculation Revisited.



Two Numbers Comparison







Simon

Sven
Zhong
Fili

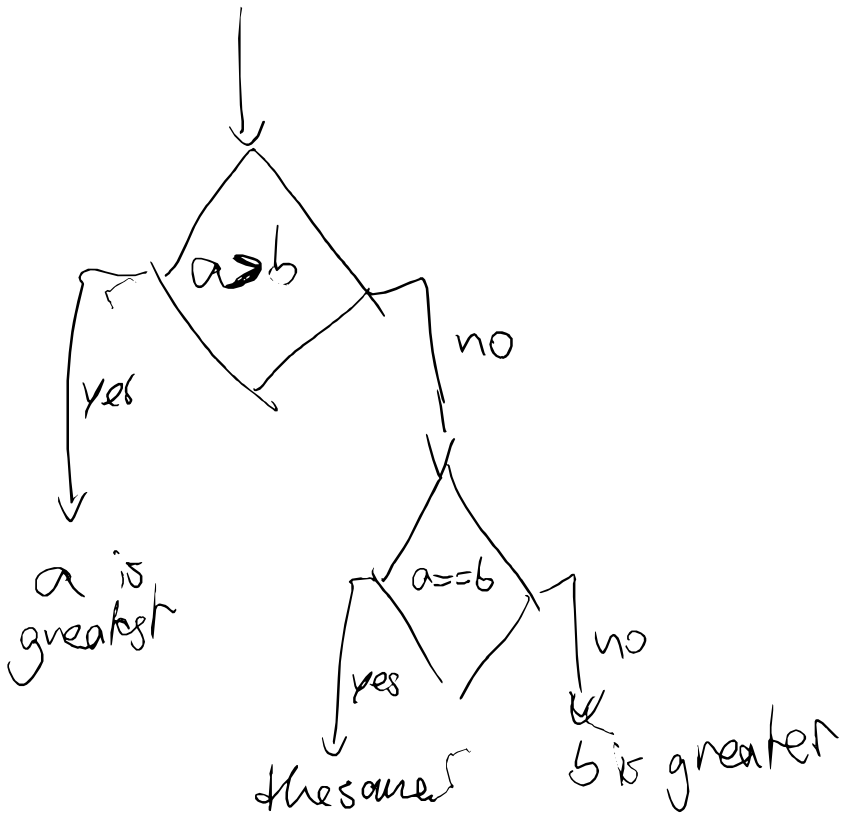
⇒

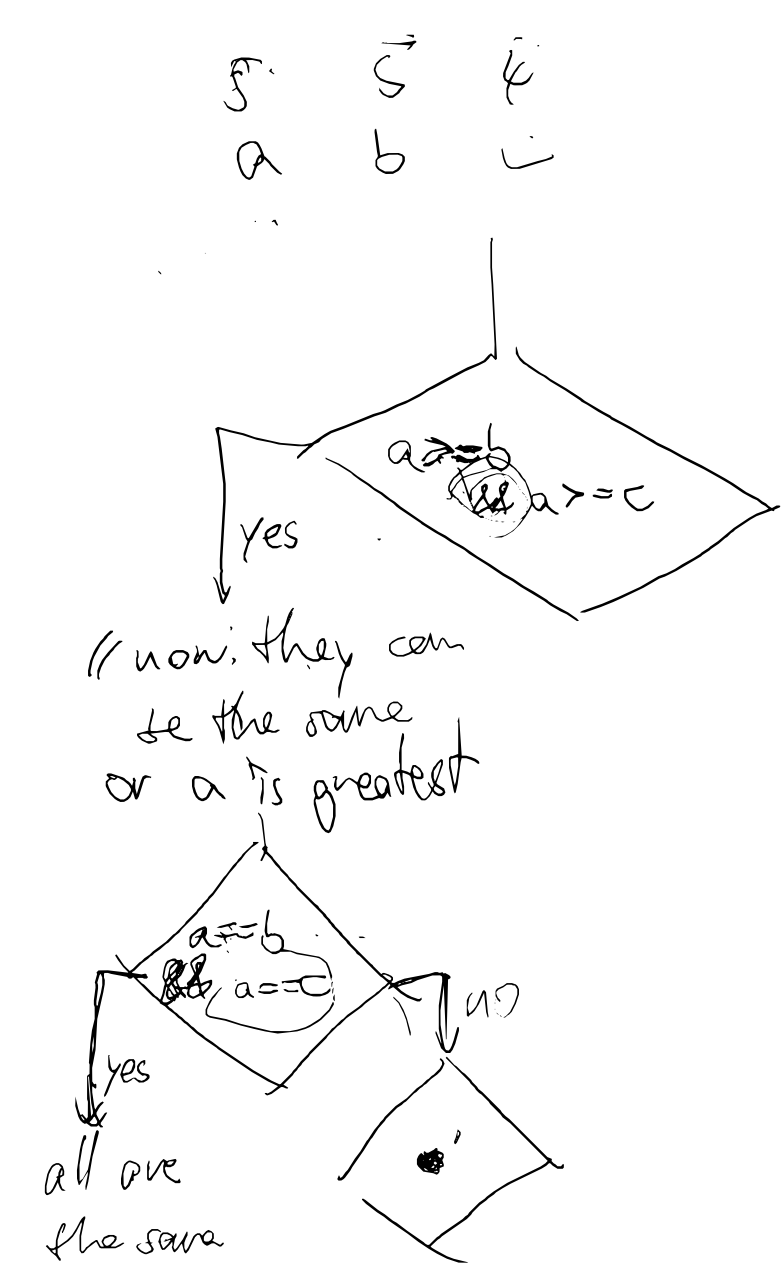
Fili
Simon
Sven
Zhong

Compare two numbers

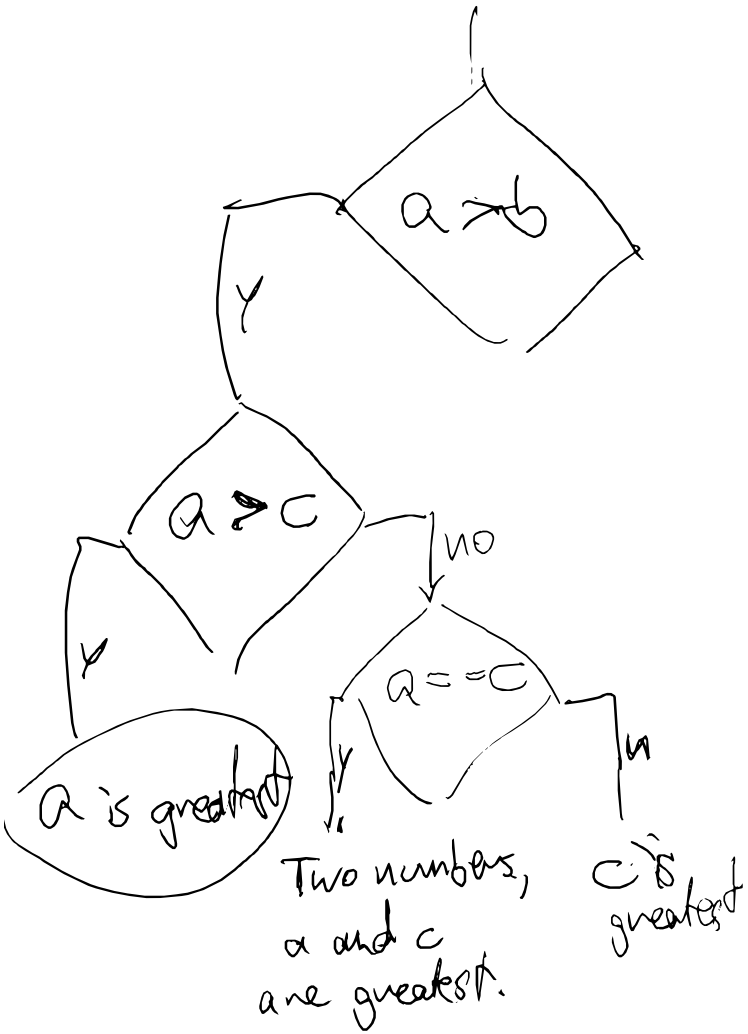
"Control Flow" (if/else)

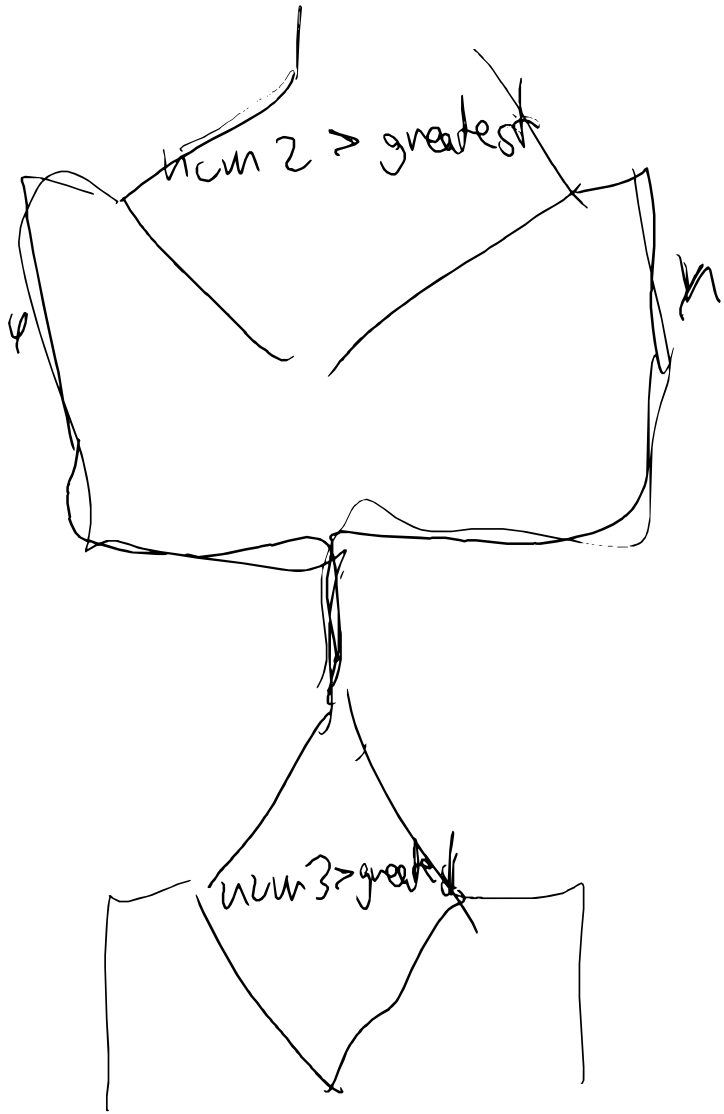
⇒ Control Flow Diagram




a
b
c
a==b
&&
a>=c
yes
// now, they can be the same or a is greatest
a==b
&&
a==c
no
yes
all are the same

a b c

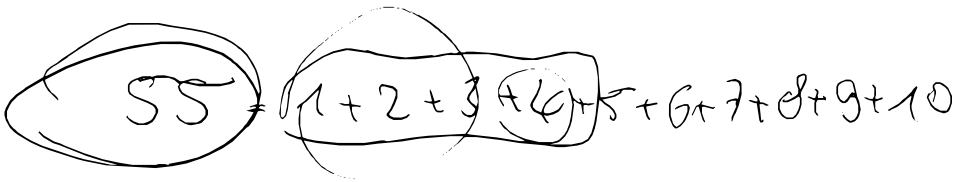

a > b
Y
a > c
no
Y
a = = c
Y
N
a is greatest
Two numbers, a and c are greatest.
c is greatest


num 2 > greatest
num3>

Exercise 9

- ask for a number
  - ↳ where to store it?
    - => variable

let n = ... e.g. 10



Hobbies

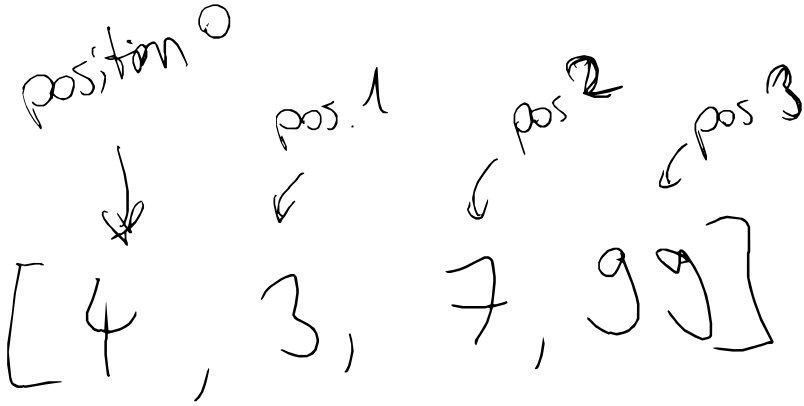
- Drumming
- Cooking
- Rowing
- ...

} "A list of unspecified number of Elements"

(A set)

- a set : something where order doesn't matter
- a list : ordered elements

Arrays == List (synonym)



a position inside the list is called index.

Arrays start with index 0.