

Day 2 2-25-2014

git pull repo branch
(from where) (what)

git push origin branch

Intro to Programming Learning Objectives

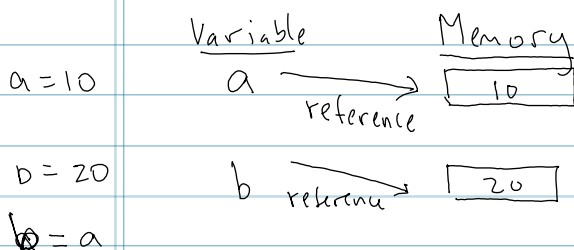
- ① • Explain concept Mental Model
- ② • XPLN Mental Model of input-output-side effect
- ③ • XPLN concept variable and reference
- ④ List 6 datatypes in Ruby

Mental Models -

- conceptual, pieces of a system working together.

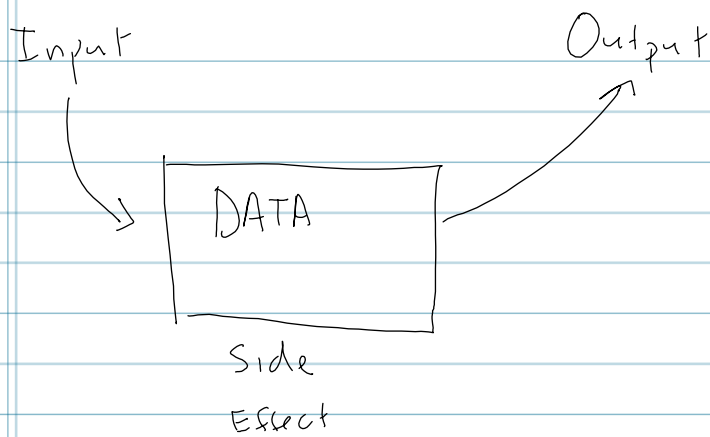
Programming - Ruby

a = 10 → what happened.



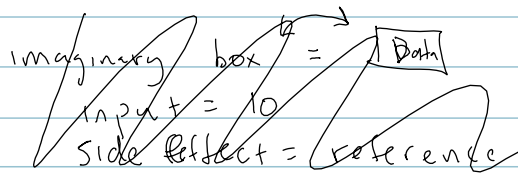
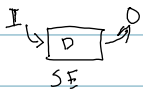
who handles the background?

Abstraction - simplifying ~~some~~ removing the details or
interworking of a process and replacing it
with



Statement is an operation on some data that has an input of data, an output of data, and a side effect modifying data.

$a = 10$



$[data] = a$

input = 10

side effect = a changed

output = new value of a

Types of Data: (Ruby)

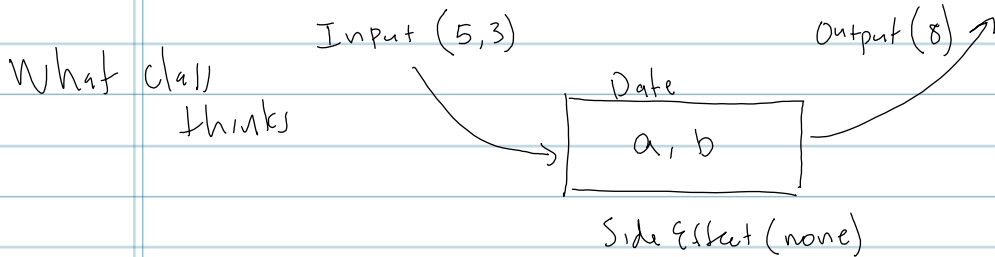
- Number
- String
- Symbols -
- Boolean - true/false
- Array - list
- Hash - key/value pairs

Intro

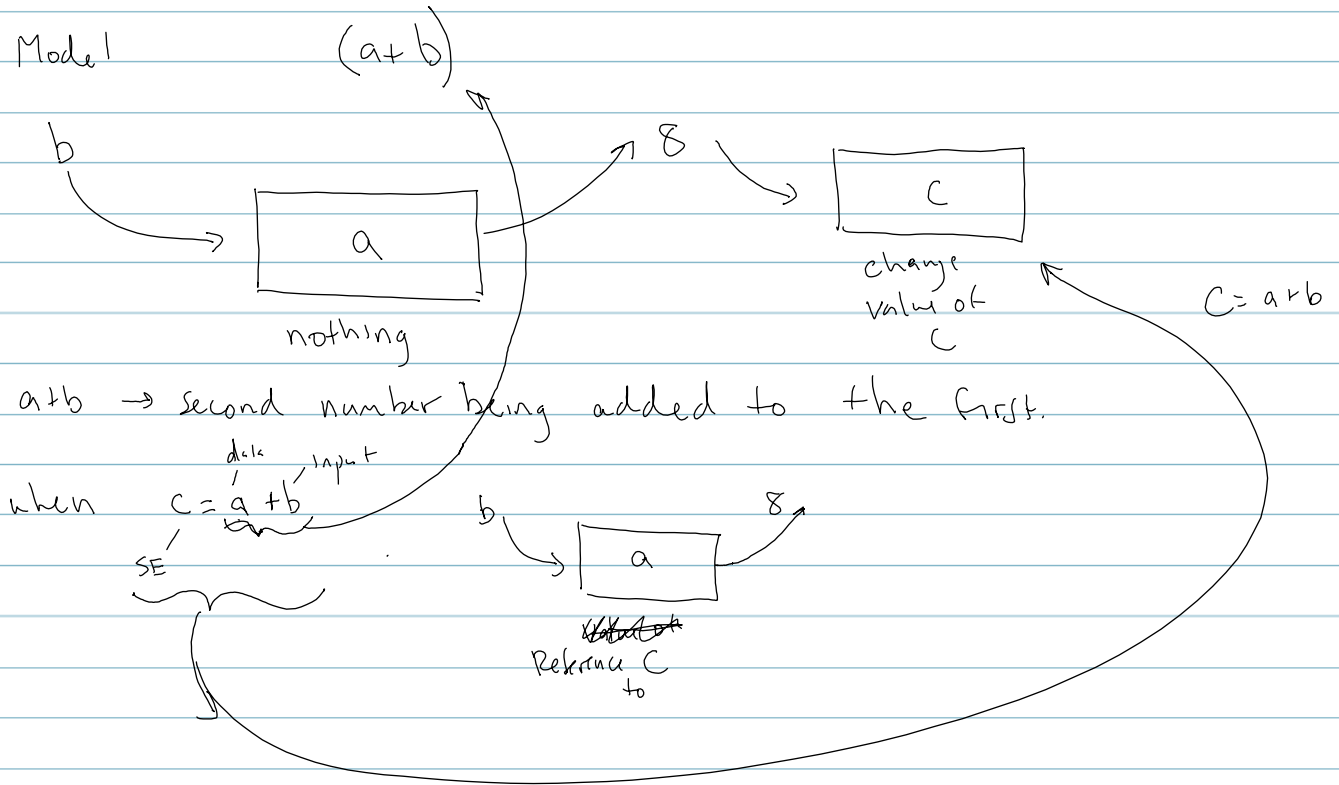
Operators on Numbers in Ruby

$+$, $-$, $*$, $/$

Example $a=5$ $a+b$
 $b=3$



Ruby Model



- In the case $a=5$ Input = 5, data = a, S/E = Δa , output N/A
 $b=3$ Input = 3, data = b, S/E = Δb , output N/A
 $a+b$ Input = ~~5~~, data = ~~a~~, S/E = N/A, output 8
 $C=a+b$ Input = 8, data = C, S/E = ΔC , output N/A

a 5 \longrightarrow 10
b \longrightarrow 3
C \longrightarrow 8