Programming Basics

Class # 1

Review Quiz

Human Lang →[Translator] Binary
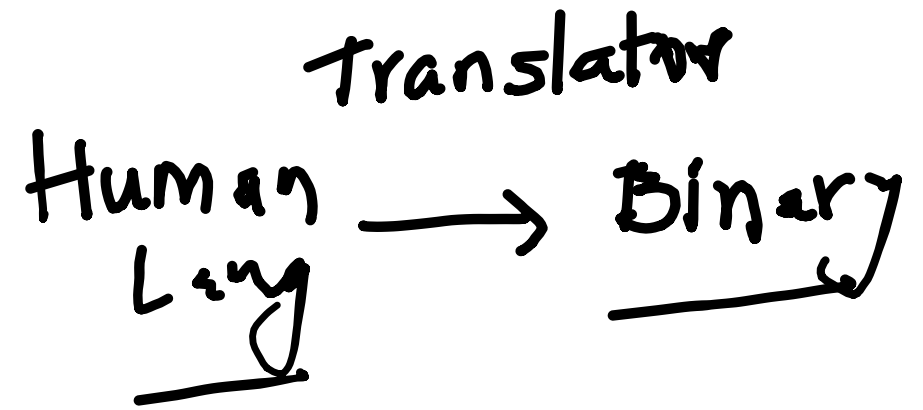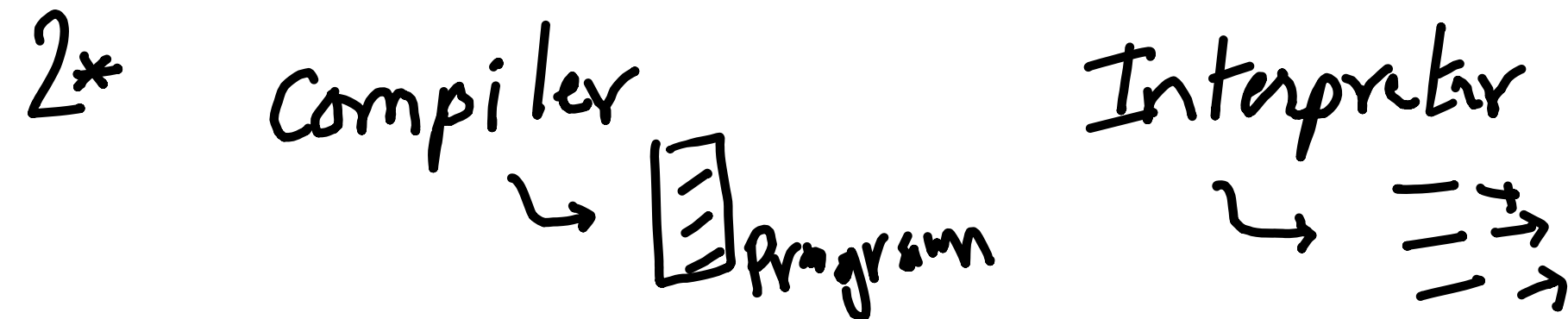
1. Why can't we program a calculator?

2. What is the difference between a compiler and an interpreter?

1* We don't have memory in a calculator.
→ Remember the commands

2* Compiler ↳ [|] Program   Interpreter ↳ = →, = →

Variables & Values

Address

Left = Right → Item

A = 10

· B = 25

· C = A + B

10 + 25

A | 10
B | 25
C | 35
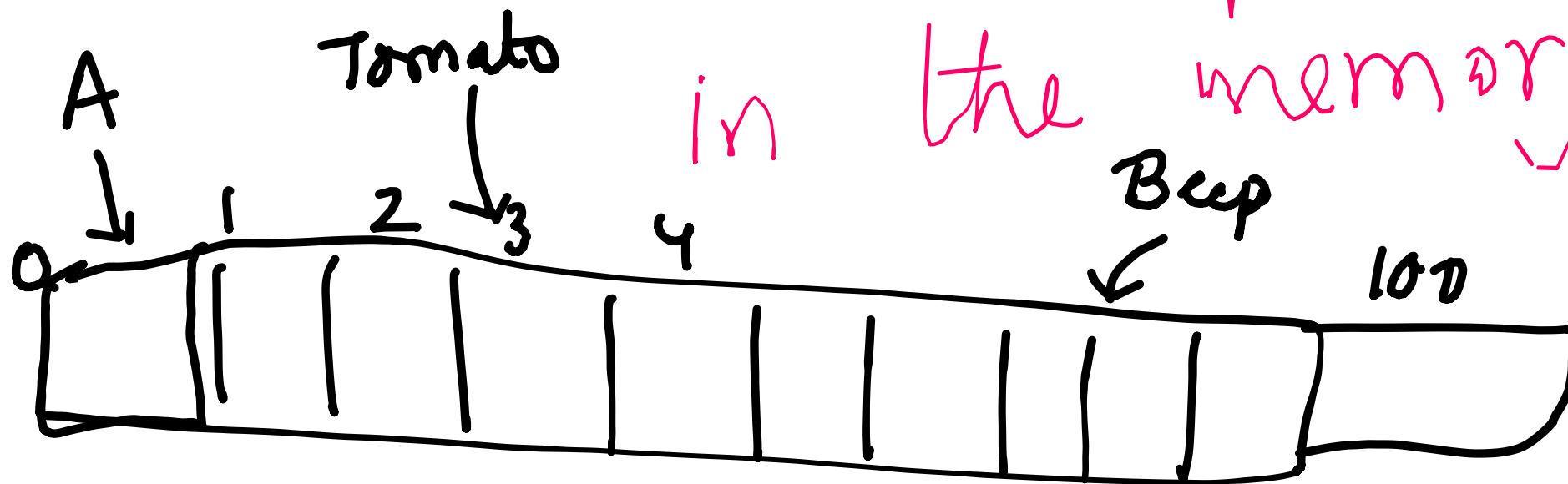
A, B, C are VARIABLES

VARY → Change

Values | 25, 10, 35

VARIABLES are Names of Places in the memory

Names cannot Start with a number.

A

Tomato

Beep

0   1   2   3   4   100

VARIABLES

have sizes, types

123

num

hello this is me

list of letters and num.

abc 23d

STRING

Values

Variables

Numeric ← Numbers

Strings ← Characters
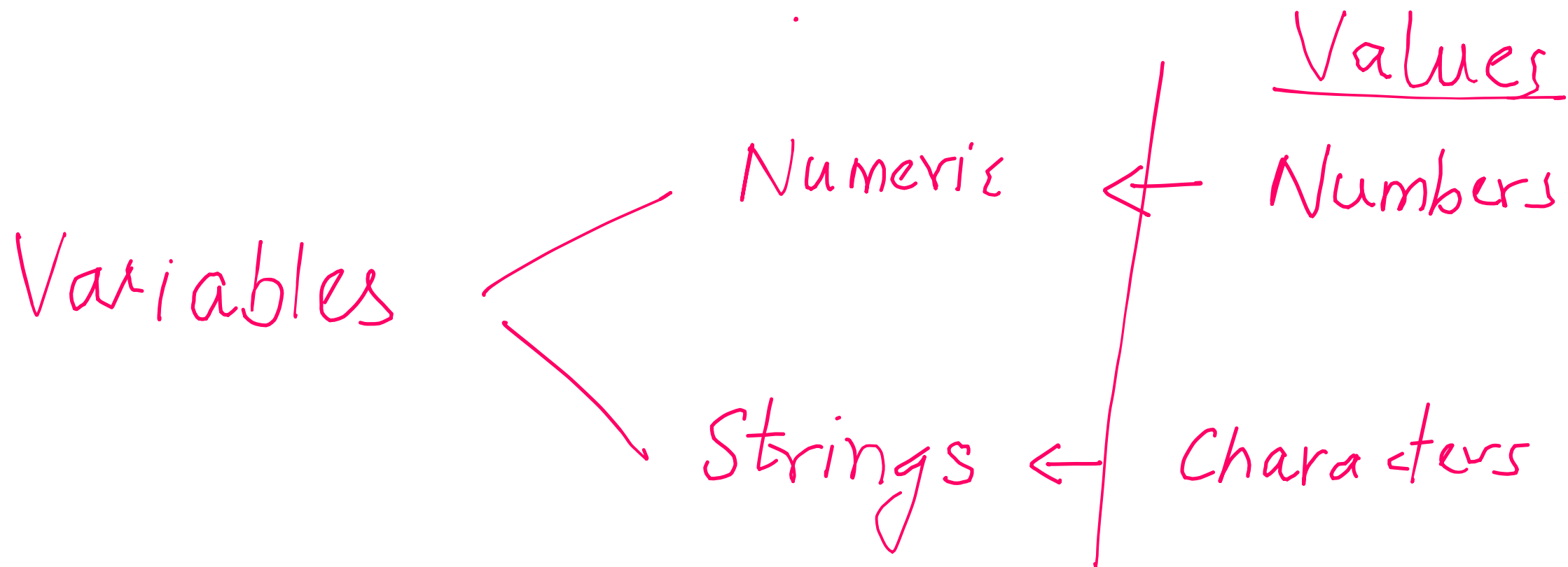
Add String Variables

↳ CONCAT ～～～

Add numeric variables

↳ Addition

* Variables — (tomato, potato), (brinjal, onion)

numeric ↗   string. ↑

* Values — 127, 13, "i am not superman"

numeric   string

, "but i am a human"

* Operators → +, -, *, /

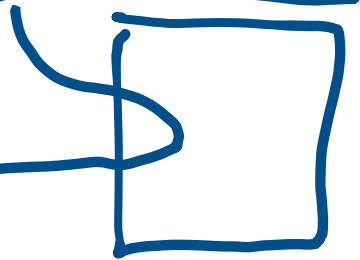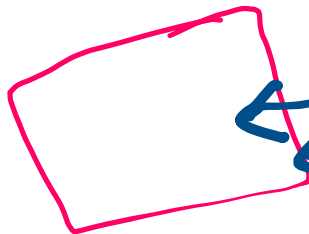# Assignment

Left $=$ Right

Variable

value   variable

```
x = 10
y =    x + 1
z =    x * y
print (z)
```

x [10]

y [11]

z [110]