# Python Refresher

**Part 1**

3 Sessions of python Refresher

**Part 2**

- OOP → 2
- Functional → 2 ←
- Time and Space Complexity
- Exception handling
- File - handling

- Assignments → Mandatory
- Home - works → optional

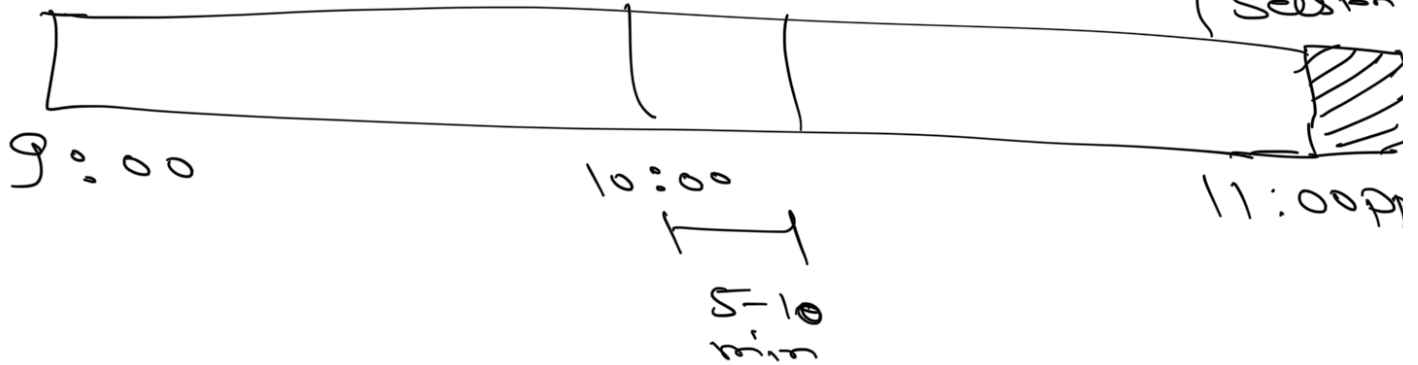PSP → Problem Solving %

- Extra Q's

→

2 hour

9:00

10:00

11:00pm

D. Solving
Session

5-10 min

Data-types in Python

1) Python does not have any primitive data-type

2) FCC ⇒ First Class Citizen

Everything in Python is object with Equal rights

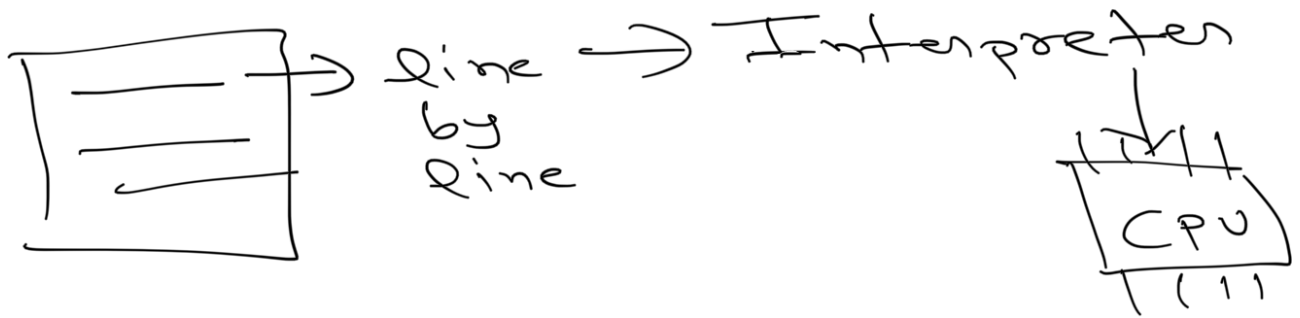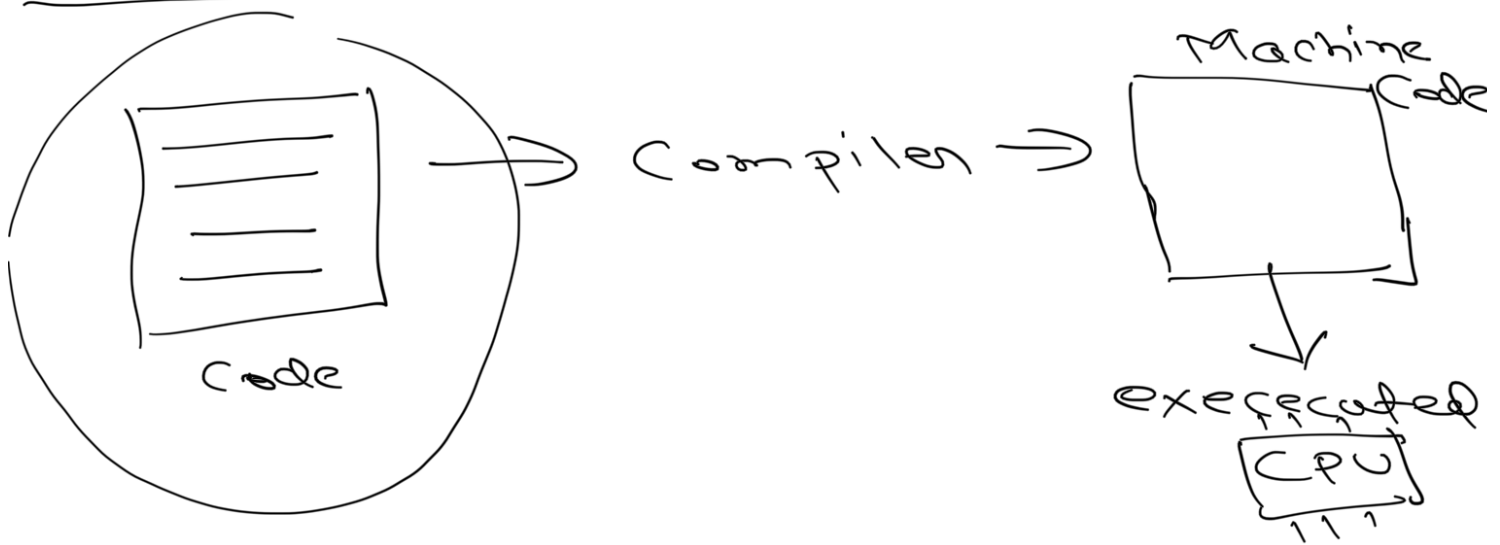3) int, float, Complex, boolean String

3) Python is dynamically typed
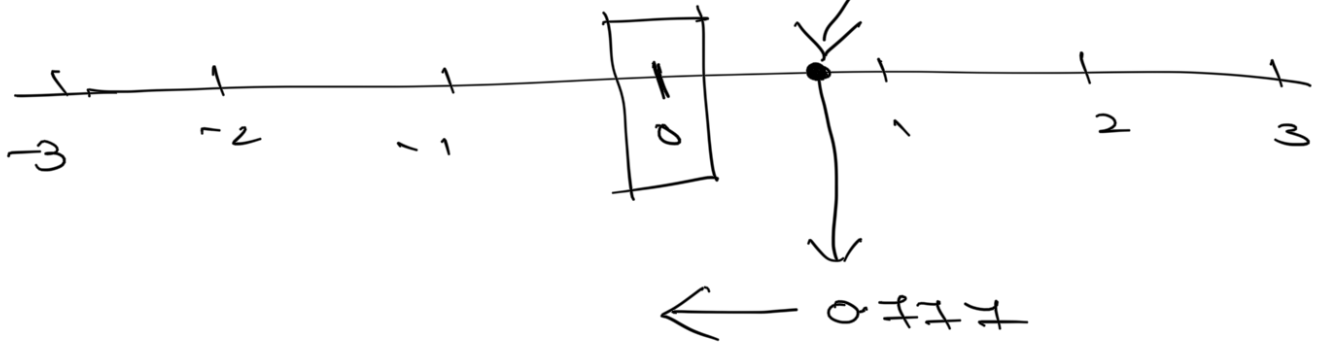
Interpreted or Compiled?

Ans: It depends

•PYC

$\longleftrightarrow$

Cython , PYPY , JPython

---

Code

→ Compiler → Machine Code

executed

CPU
( 1 1

→ line
by
line
→ Interpreter

CPU
( 1 1

---

Everything is an Object

# Floor-Dive

$$a // b \Rightarrow (a / b)$$



← 0777

$a / b$

| 1. 9 9 9 9 9 9 9 --- 9 |

$a // b$

7 7

---

## Mutables

⇒ Value can change

⇒ List / Set / Dictionary

## Immutable

⇒ Values cannot change

⇒ Everything Else

# Memory Management

⇒) Immutable

$$Q = 10$$
$$Q = Q + 1$$



Stack
Memory
or
register

Heap
Memory

0XCC2

+1

0XCC1
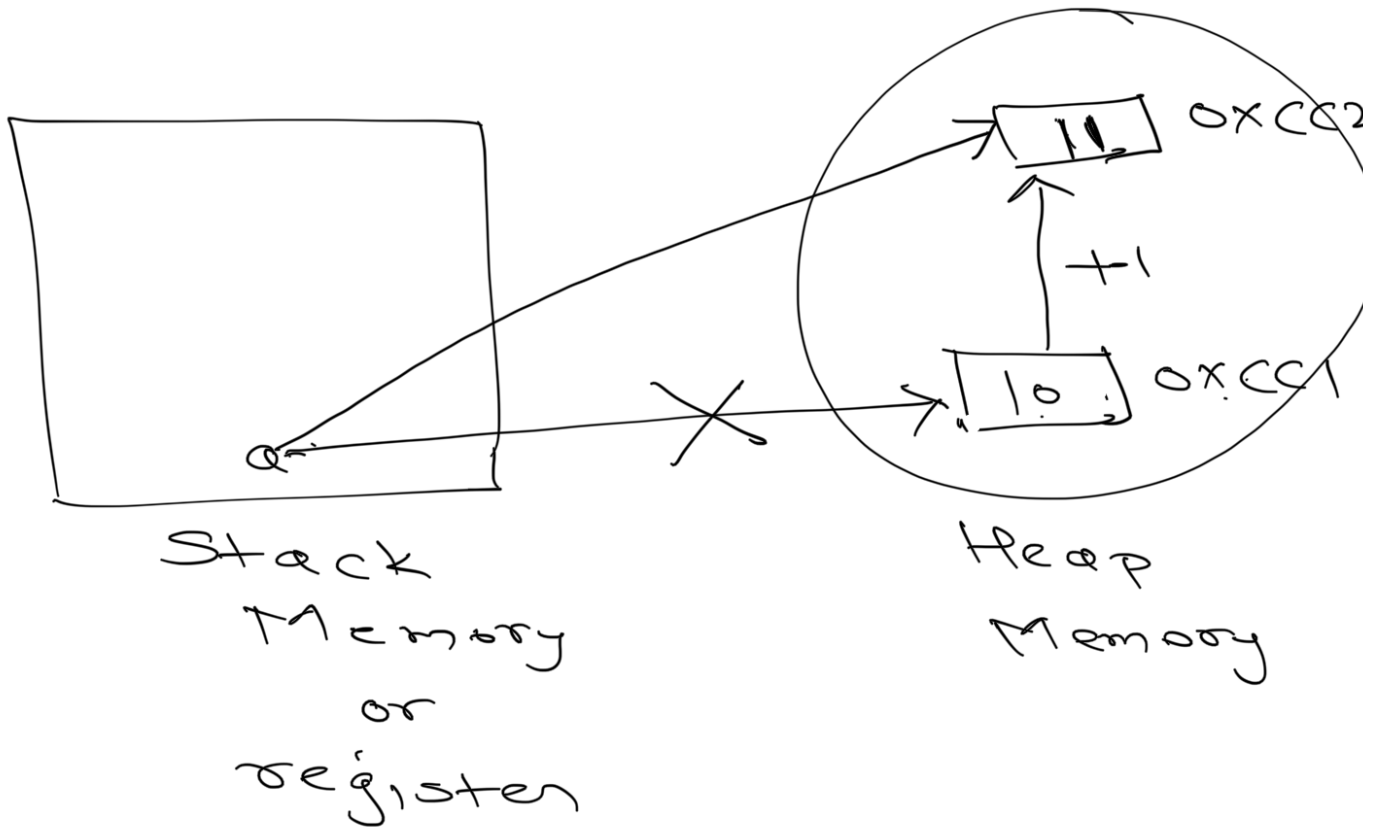
## R.C Table

| 0 | 10 |
|---|----|
| 1 | 11 |
|   |    |

G.C
Garbage
Collection

$$Q = 10$$

R.C Value

| | |
|---|---|
| 0 | 10 |

$$b == a$$
$$a = a+1$$

a   and   b

reference
Variables

Print (a, b)

$$a = 10$$
$$b = a$$
$$a = a + 1$$

| R | V |
|---|---|
| 1 | 10 |
| 1 | 11 |