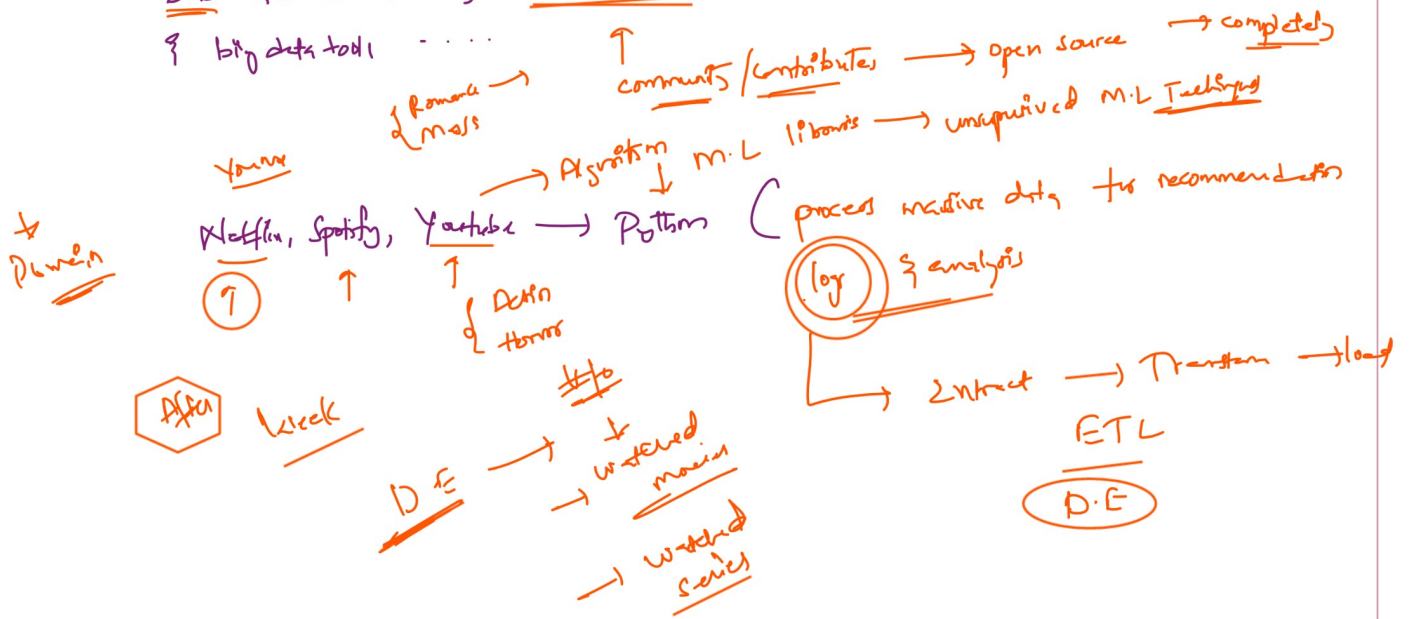


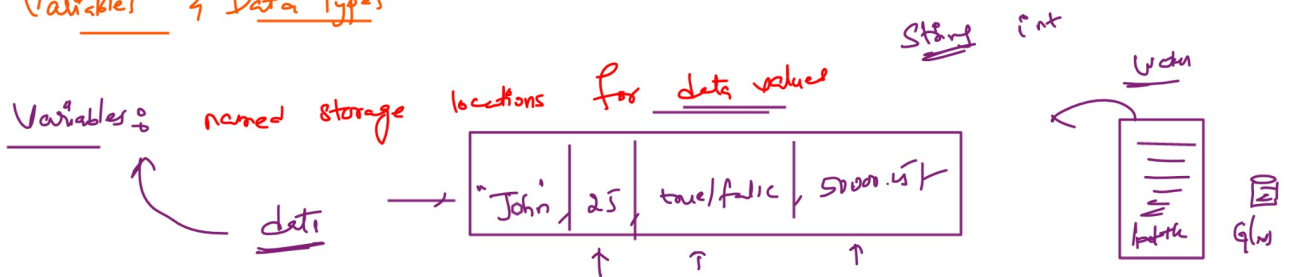
# Python

→ Beginner friendly, high-level programming language that is widely used in D.E for its readability, vast libraries, easily integrate with database, powerful APIs & big data tool.



## Python Basics :

### Variables & Data Types



→ No need to define type declaration (dynamic typing)

→ we need to create a variable with a name

per\_name = "John"  
age = 25

→ Case-sensitive

age = 25  
(age) → (Age)  
x x

## Data Types

Integer: whole numbers

Count = 12  
negative = -10

Float: decimal values

19.95 pi = 3.14159

notation = 6.022e27

String:

name = "Sai" name = 'Sai'

''' ← Triple quoted

→ This is a Python language  
→ Basic '''

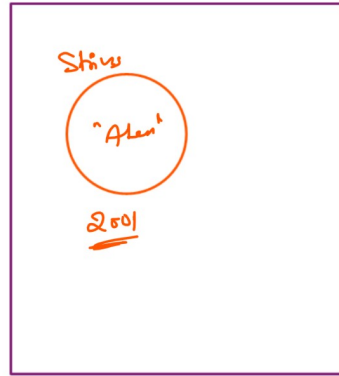
Boolean: True/False    true → false

is\_alive = True / False    RAM

## Memory mapping



RAM



Heap Area

## Type Casting

⇒ Converting a value from one data type to another data type

\* String → number

`int('25') → 25`

\* Number → String

`str(42) → '42'`

\* Integer to float

`float(10) → 10.0`

\* float to Integer

`float(10.9) → 10`

\* Boolean

`bool(0) → False`

`bool(2) → True`

`bool('') → False`

`bool('Si') → True`

Manipulation

`2025 + 1`

`int(2025) → 2025`

`2025 + 1 → 2026`