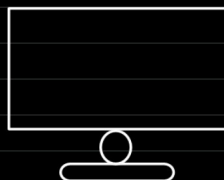
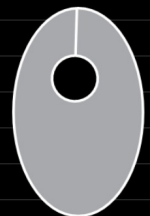
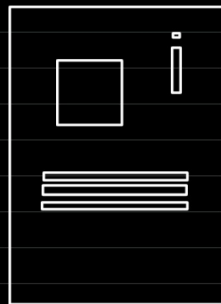


14-01-2026

- \* Wed → 8:30 to 10:30 IST (pm) → Boost
- \* Sat, Sunday → 9:00 to 1:00 IST (pm) → Max
- \* Mentor → Mona

### Agenda:

- \* Computers
- \* Tools (installation) → why
- \* Special announcement



$$\text{input} \rightarrow \text{process} \rightarrow \text{output}$$

input lexile :

Device that talk to your computer:

input  $\longrightarrow$  computer

mouse, key board

Output device: Device used to show output from the computer.

computer  $\longrightarrow$  output

• screen, printer, speaker.

The Brain: CPU (central processing unit) : low memory  
→ calculation : short term memory

$\rho_{\text{core}}$   
 $\downarrow$   
 $\downarrow$   
 $\downarrow$   
 calculation)  $\rightarrow 70 \approx mb$

→ 3.ghz → 3 ~~million~~ <sup>billion</sup> calls ≈


→ RAM : (Random Access Memory)

- : app, the computer puts it on RAM when you open it.
- : ram storage gets cleared, not permanent

→ HDD, SSD : The storage

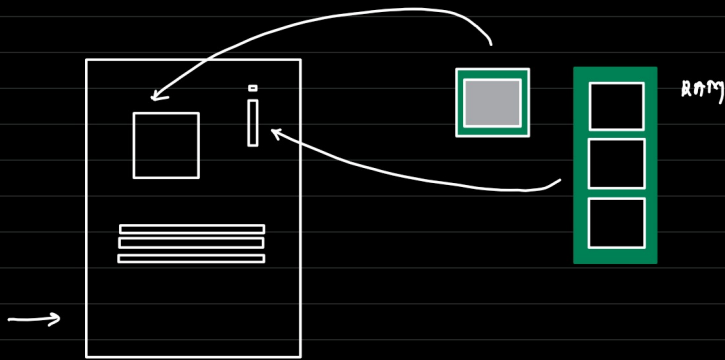
image, video)

∴ file exist, permanent.

HDD  $\rightarrow$  Hard disk Drive  $\rightarrow$    $\rightarrow$  slow

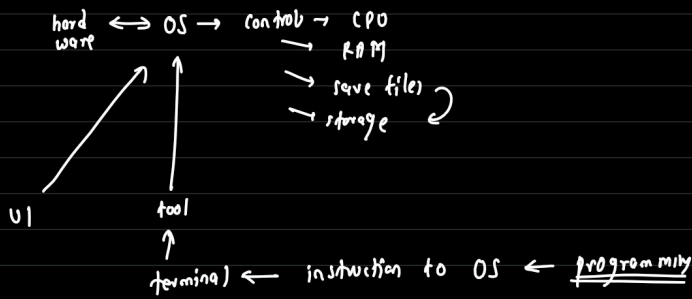
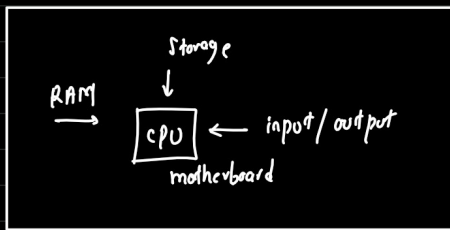
SSD  $\rightarrow$  Solid State Drive  $\rightarrow$  IOOOO  $\rightarrow$  fast

## Intermediate



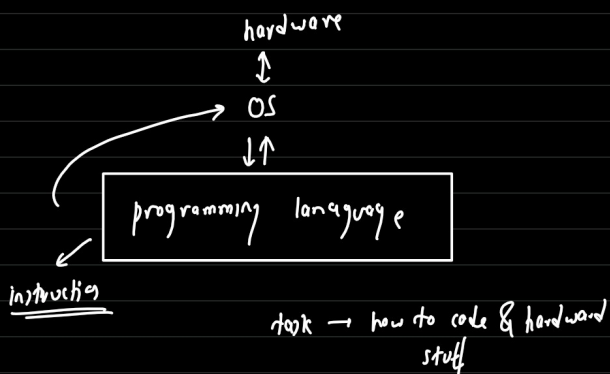
BIOS → OS  
→ CPU  
→ RAM

OS → window  
Mac  
Linux

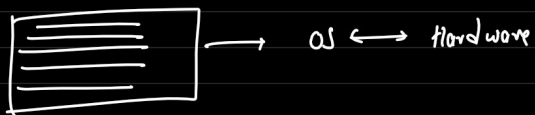


\* instruction → send my query to chatgpt and get the result.

→ Developer → programming language



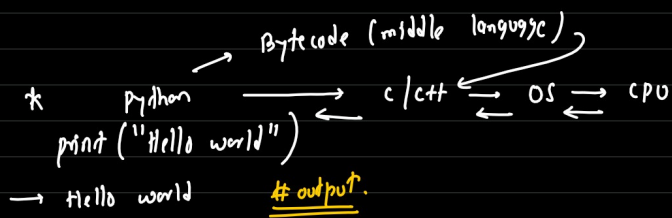
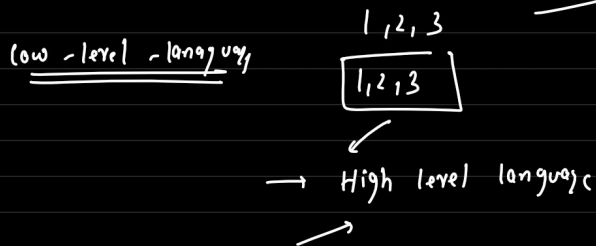
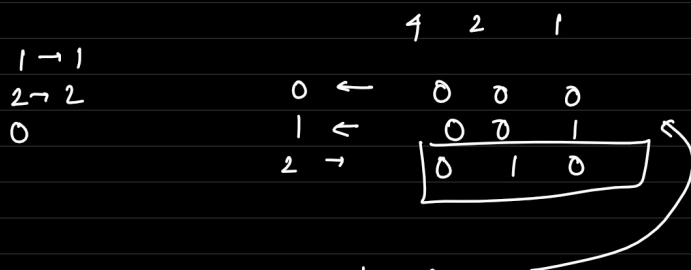
\* C, C++, C#, Java, Python



→ Data Science → Python

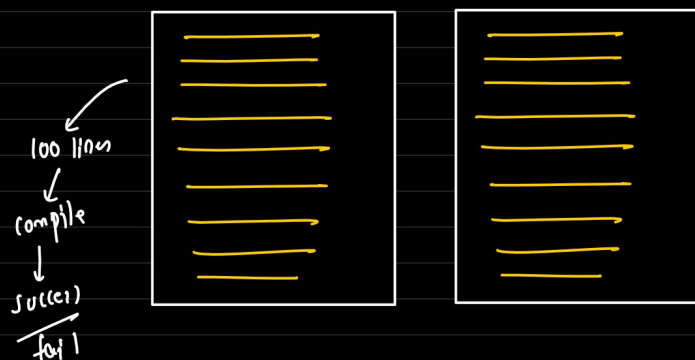
CPU → electricity of 1 / 0

0 / 1 → binary language



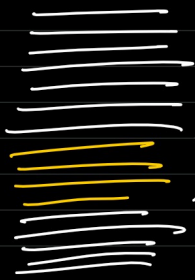
\* compile

\* Interpreted



Assignment: English

compiler



Teacher → fail

fail

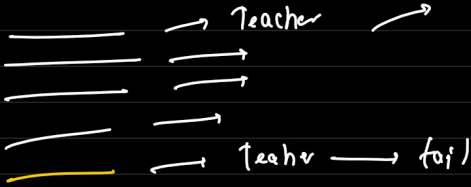
100 → Once

→ fast

→ hard to change

Assignment: English

Interpreter

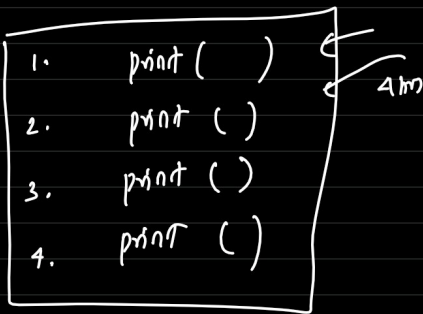


100 → 100 times

→ quick feedback

→ slow

python → Interpreter + compiler



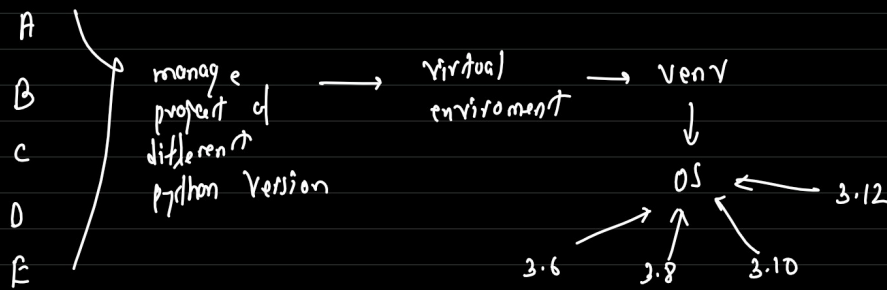
python → programming language → 33 years old

coding → project → set of tasks

↑  
2020 → 3.6

project → 3.14  
↑  
2026

instagram → 20 → 2026  
instagram → 1 → break



software → conda — package manager  
→ uv —

Tools:

- Terminal
- programming language → python
- project manager → uv
- code? → Tool → notepad  
→ Rich text / text edit

Tool → write, update, create, delete → Editor

→ write, update, create, delete  
↑

run, debug, extensions & more  
functionalities

→ IDE → VS code

Integrated → pycharm

Development → spidev

Environment → cursor

→ Andriagram

python → software

