

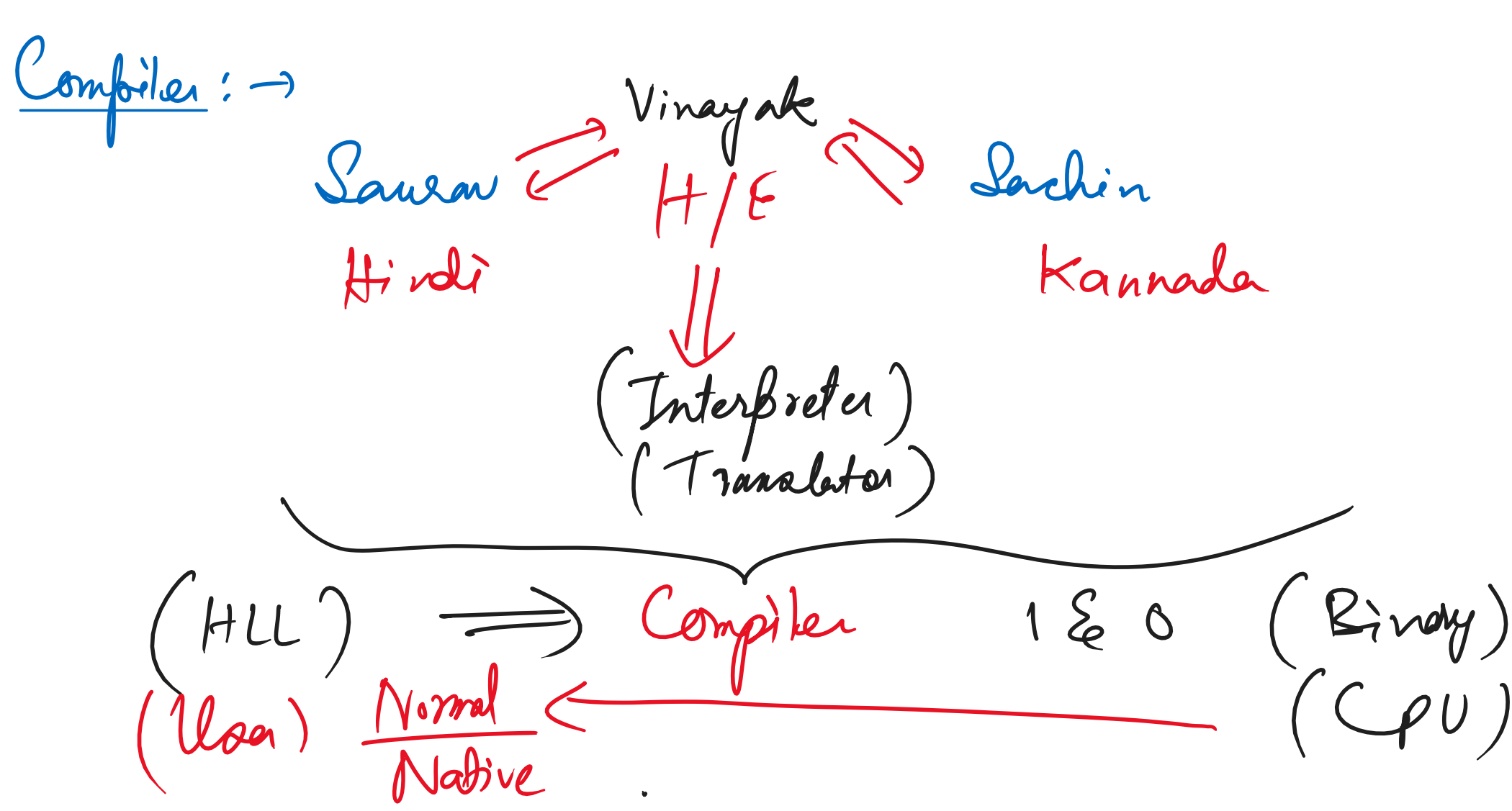
#ECE #EEE 6th Semester Programming

Programming → The process of giving instructions to the OS to perform some task.

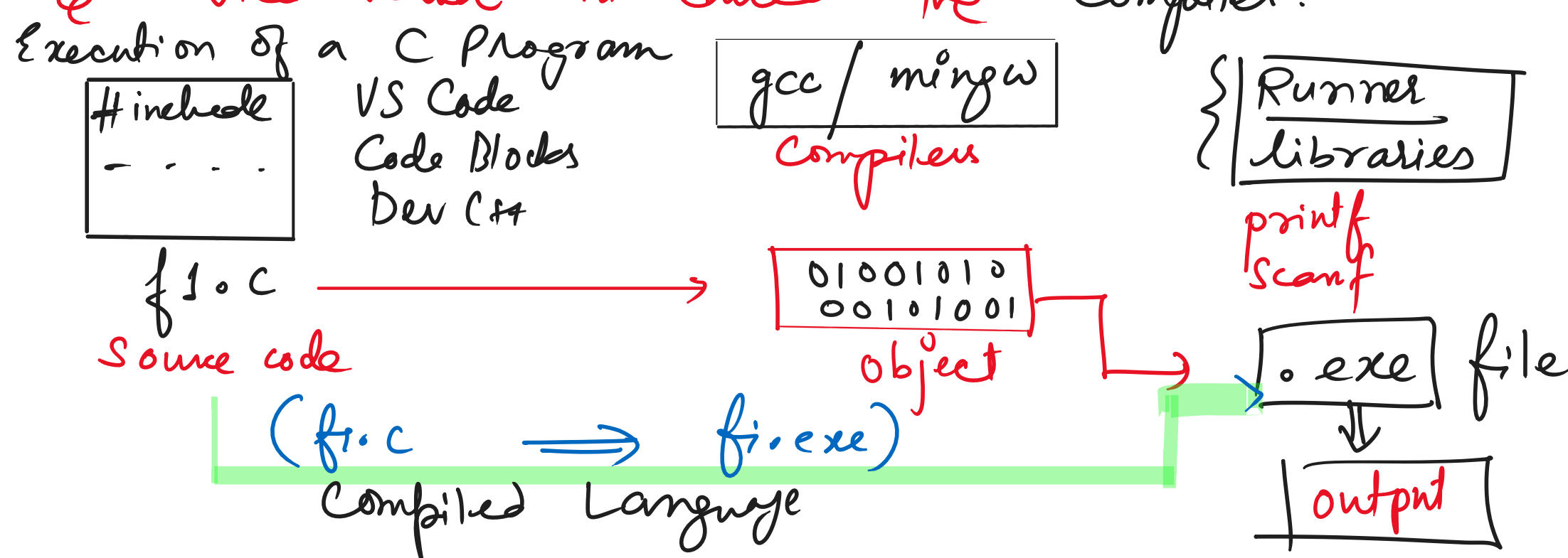
Programming Language → Language use to give instructions.

Program → set of instructions (Hi) → IT industry (Source code) app (.exe file)

The set of instructions given in any language (C, C++, Java, Python) to perform some task. `fi.c`



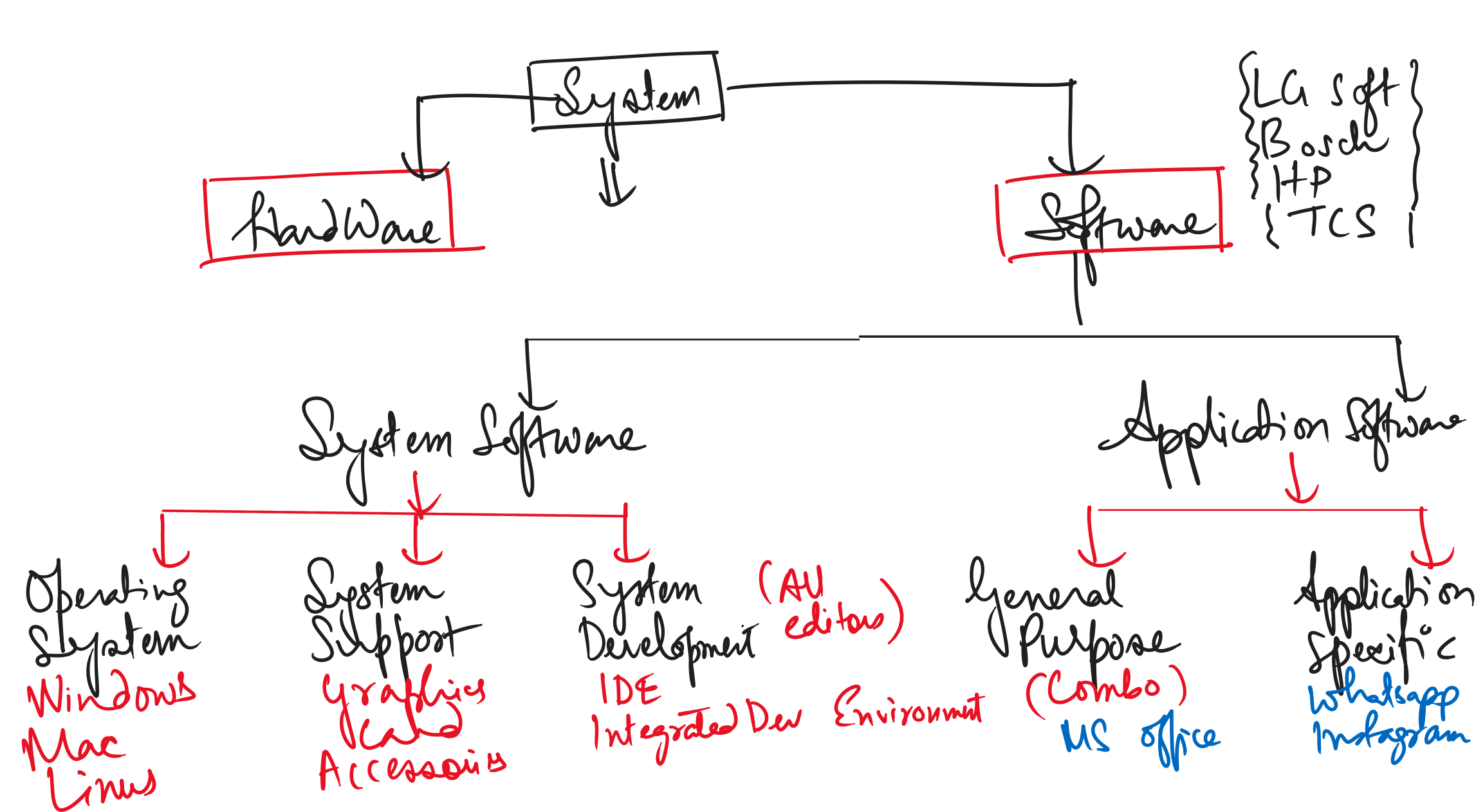
The entity which interacts with the user & the system to convert / translate HLL to MLL & vice versa is called the compiler.



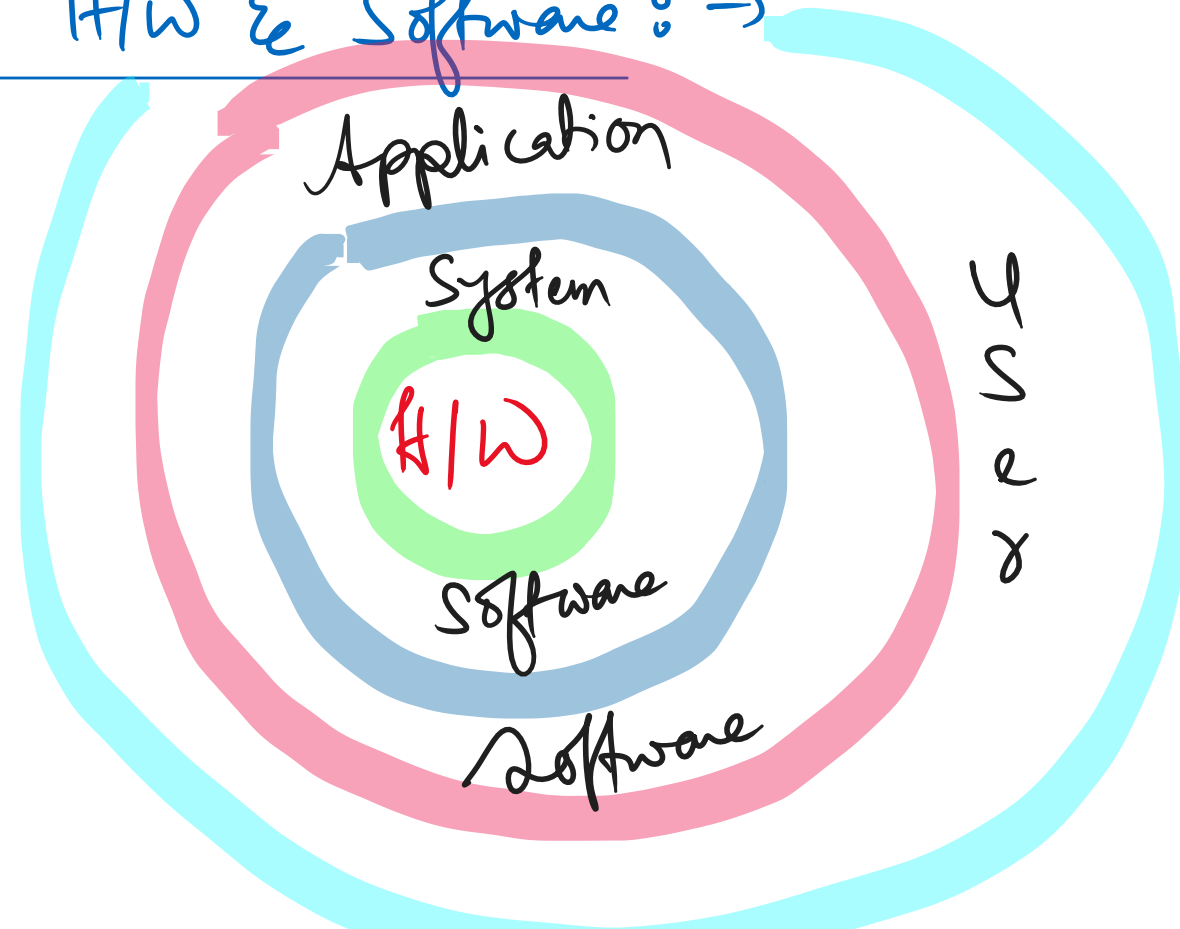
GCC version : gcc --version

File to Object : gcc filename.c -o filename.o

Execution : filename.o



Relation B/W HW & Software : →



(1942) → Denis Ritchie → A + modification = B {AICTE, NAAC, NBA}

(1972) → C (Founded in the year 1972)

When was the 1st standard version of C introduced?

⇒ 1989 → ANSI-C [American National Standards Institute]

OS [UNIX]

Data Types in C

Primary Integer

Void void

Enumeration

Named Constants

Keyword → enum

Derived

Array

String

Struct

Union

Pointers

Short → -128 to 127 (2 bytes)

int → -2³¹ to 2³¹-1 (4 bytes)

long → 8 bytes

Floating

float → 4 bytes

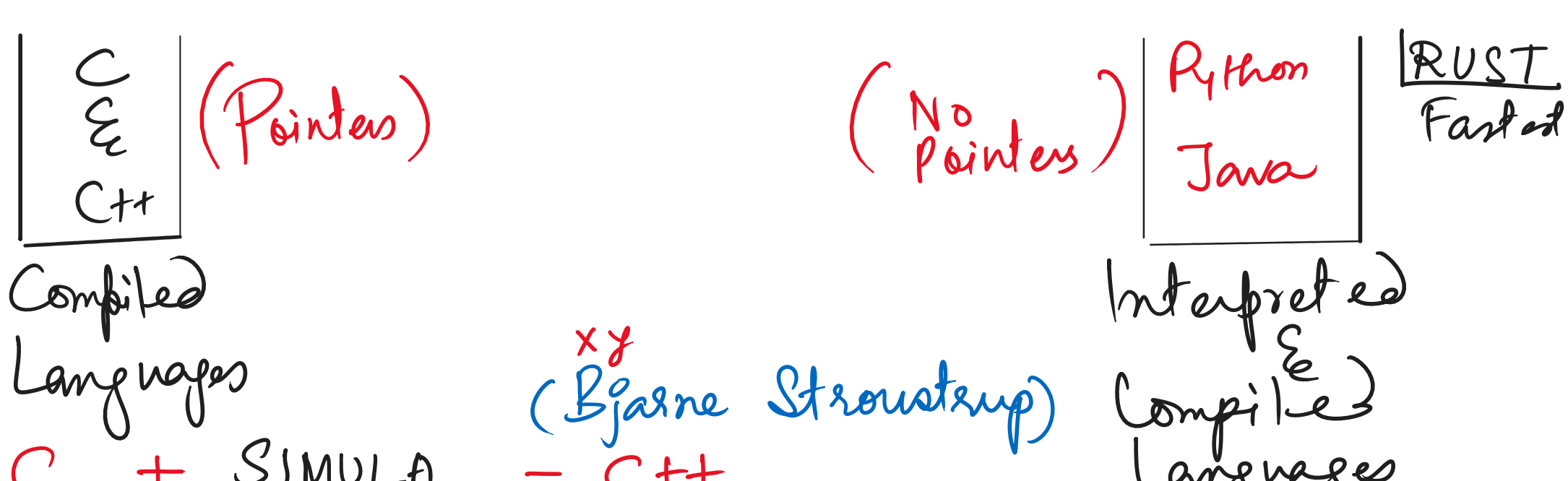
double → 8 bytes

Character

char → 1 byte

By default : enum → integer (4 bytes)

{No default bool data type we use <stdbool.h>}



(1995) C + C++ = Java (James Gosling)

Laboratory : Sun Micro Systems (Oracle)

coffee (Bean)

(Java)

(Childhood) → Show : Monty Python Flying Circus

Guido van Rossum ; (16 days) Python → 1991

{C → POPL} Procedure Oriented Programming Language

{Java → OOP} Object Oriented Programming Language

→ {classes & objects}