

# ECE #EEE 6<sup>th</sup> Semester Programming

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

Programming Language → Language use to give instructions.

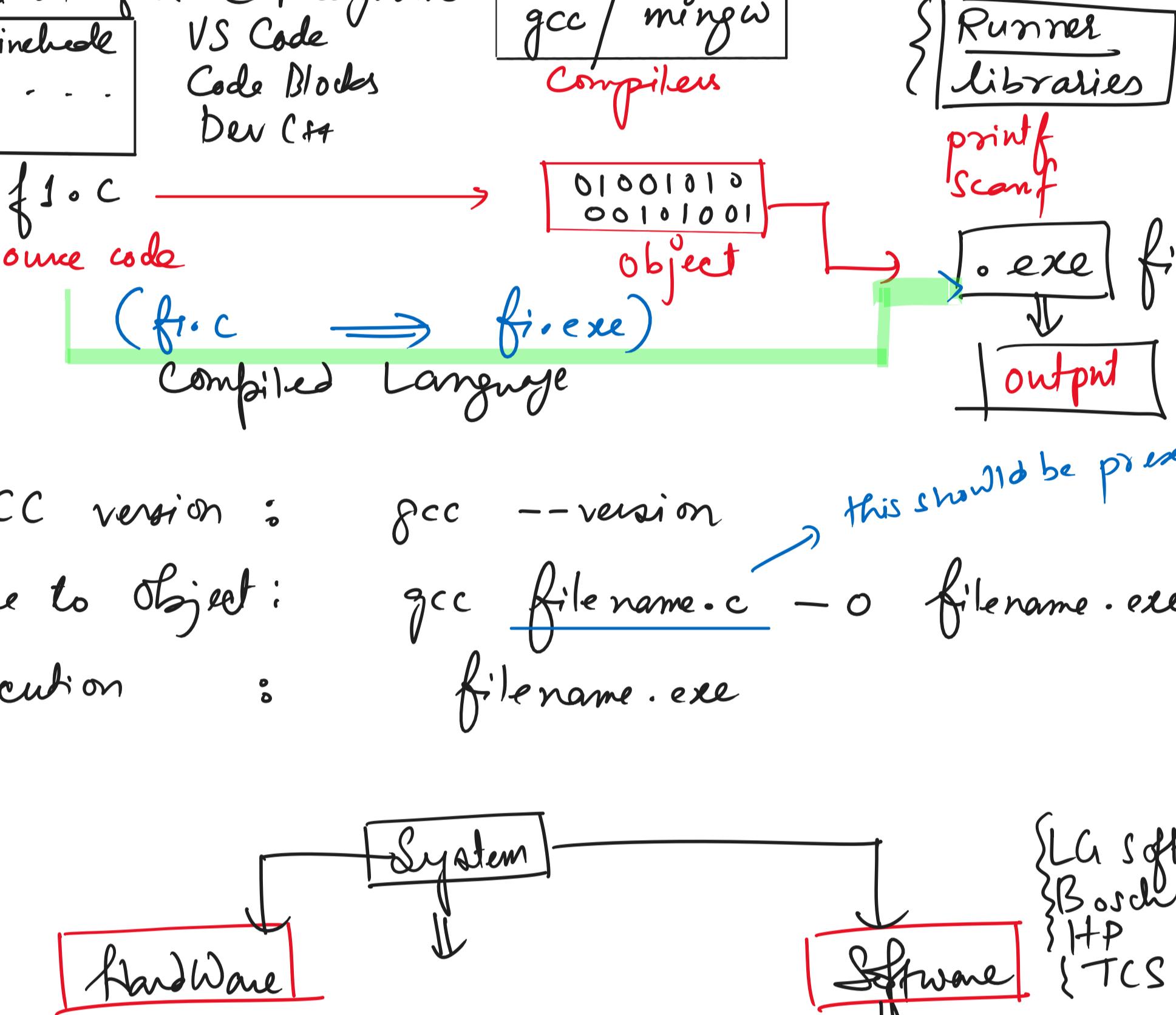
Program → set of instructions (Hi)

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

#include  
printf("Hi"); } → IT industry (Source code)

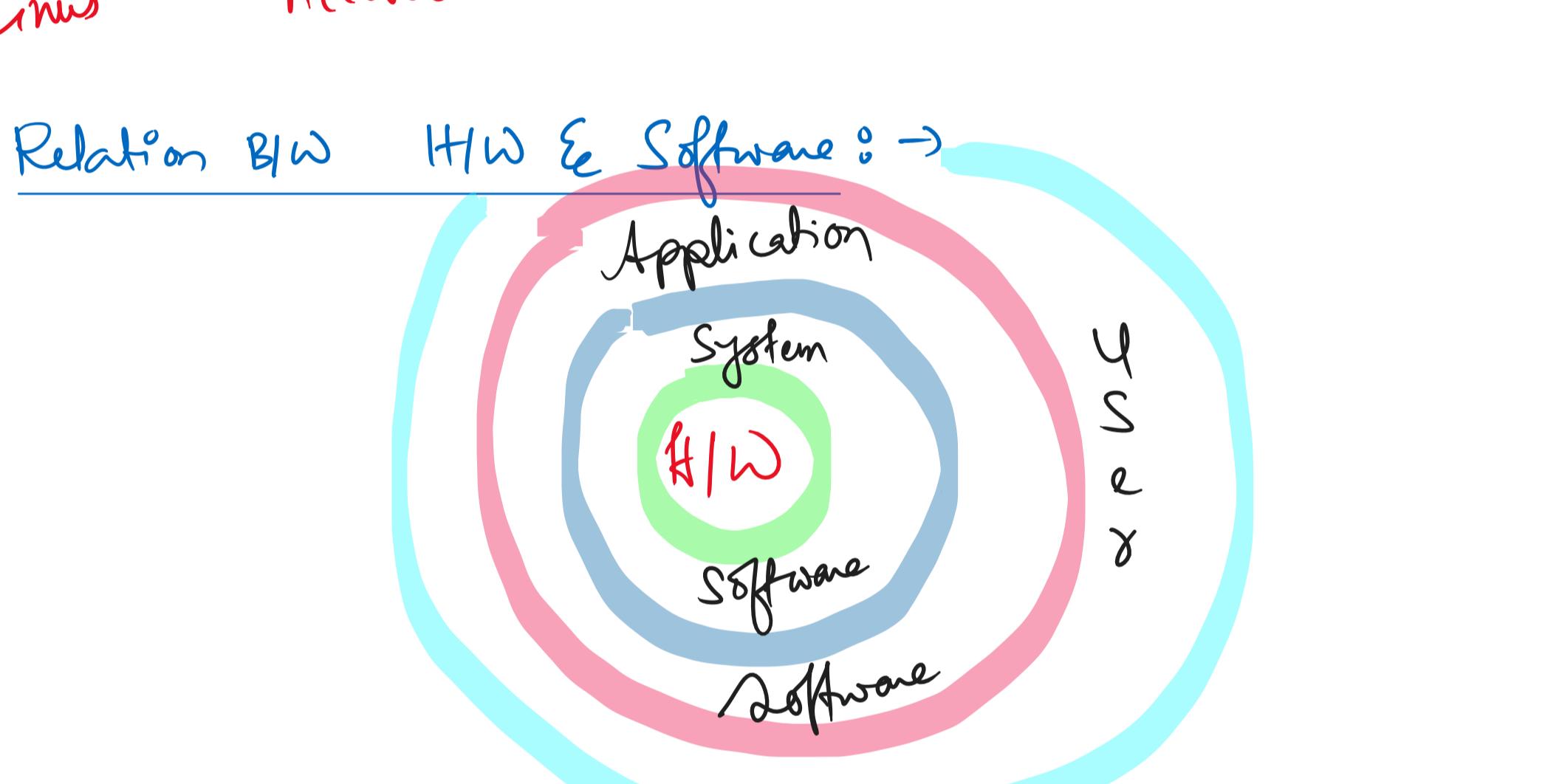
app (-exe file)

Compiler :-



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

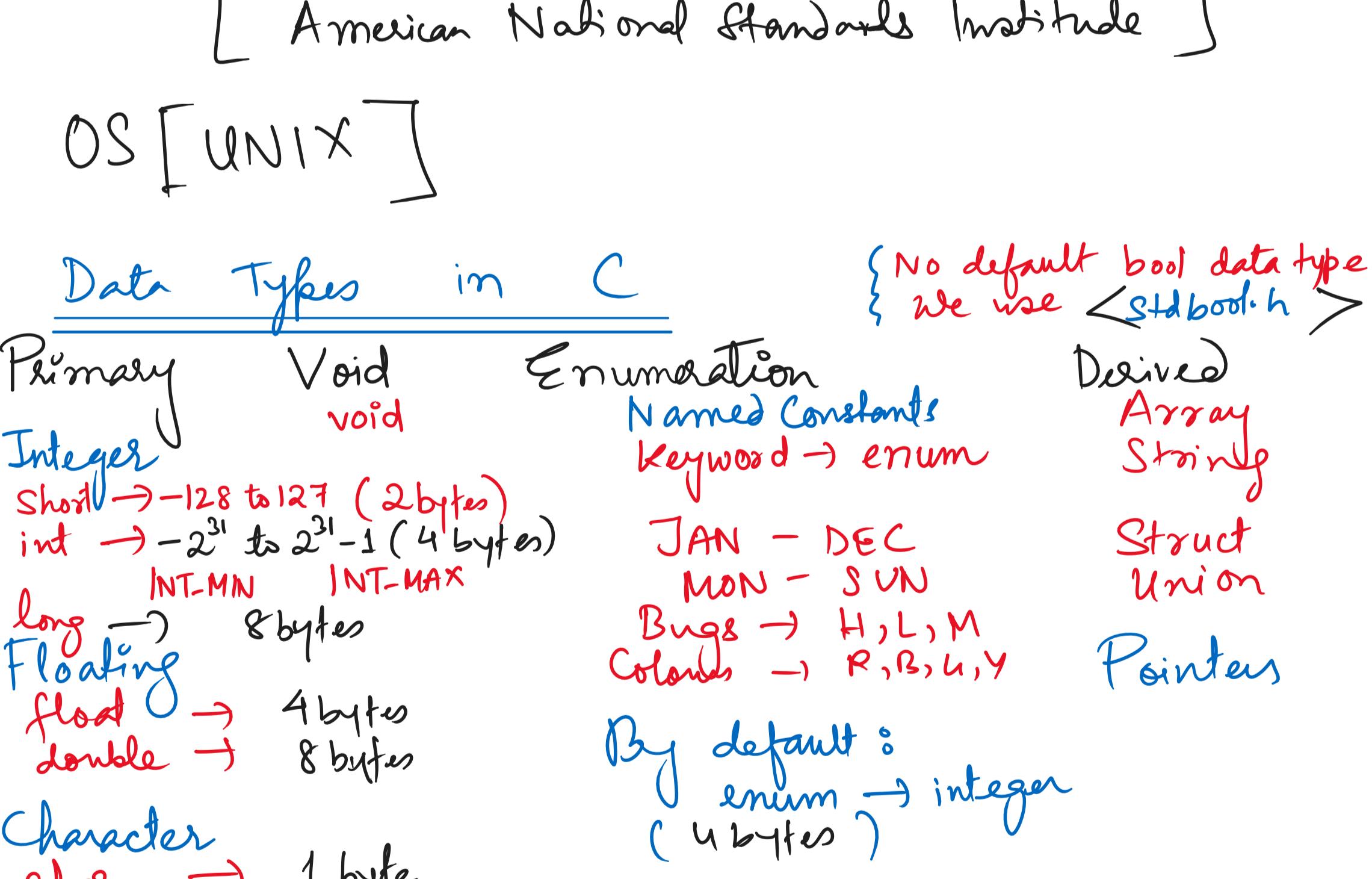
Execution of a C Program



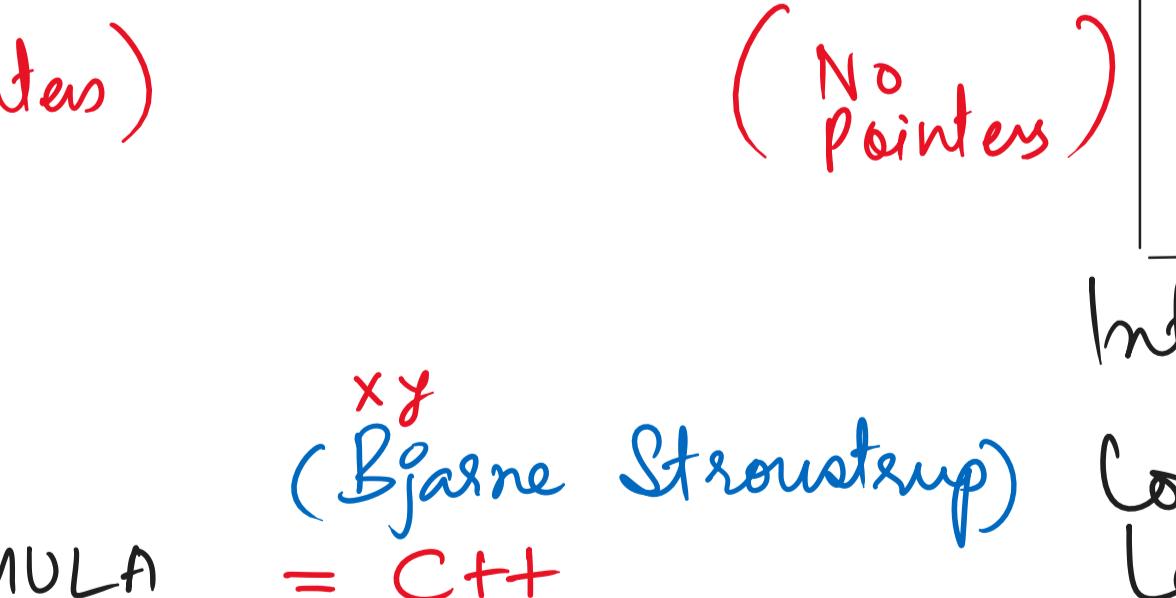
GCC version : gcc --version

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

Execution : filename.exe



Relation B/w H/W & Software :-



(1942) → Dennis Ritchie → A + modificn = B { AICTE NAAC NBA }

(1972) → C (Found 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 { No default bool data type we use < stdbool.h > }

Primary Void Enumeration Derived  
Integer void Named Constants Array String  
short → -128 to 127 (2 bytes)  
int → -2<sup>31</sup> to 2<sup>31</sup>-1 (4 bytes) Keyword → enum Struct Union  
long → 8 bytes  
Floating Point → 4 bytes  
double → 8 bytes  
Character char → 1 byte By default : enum → integer (4 bytes)

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

↪ Laboratory : Sun Micro Systems (Oracle) coffee (Bean)

(Childhood) → Show : Monty Python Flying Circus (Java)

Jurgen van Rossum ; (16 days) Python → 1991

{ C → POPL } Procedure Oriented Programming Language }

{ Java → OOPL } Object Oriented Programming Language }

↪ { classes & objects }