

ECE  
EI  
Robotics } VS Code  
CLION

JSSATE → NAAC  
NBA  
AICTE

\* Roadmap for C Language :->

1972 → Denis Ritchie → 1942  
A+ modification = B

(C) → 1972 → Accepted Worldwide →

ANSI → American National Standards Institute  
When was the 1st Std Version of C → 1989

ANSI - C [Bosch]

Data Types: → [int, char, float] Hired ~~Rejected~~

Primary Void Enumerated Derived


Integer void (enum) Arrays  
~~short~~ int long

Floating Named Constants Pointers  
float double JAN - DEC Struct

Character MON - SUN Unions  
char R, B, G, Y (integer) C++ [Class]

Short → -128 to 127 → 2 bytes  
int →  $-2^{31}$  to  $2^{31}-1$  → 4 bytes  
(INT-MIN) (INT-MAX)

float → 4 bytes  
double → 8 bytes  
char → 1 byte

bits 

1024 bytes = 1 Kb  
1024 Kb = 1 Mb  
1024 Mb = 1 Gb  
1024 Gb = 1 Tb

Variables, Identifiers & keywords:

int a = 10; → terminating semicolon  
↓ keyword → variable or identifier → value → operator

Variable → It is a container or storage to store values depending on the type of data. The storage space is allocated by our system (CPU).

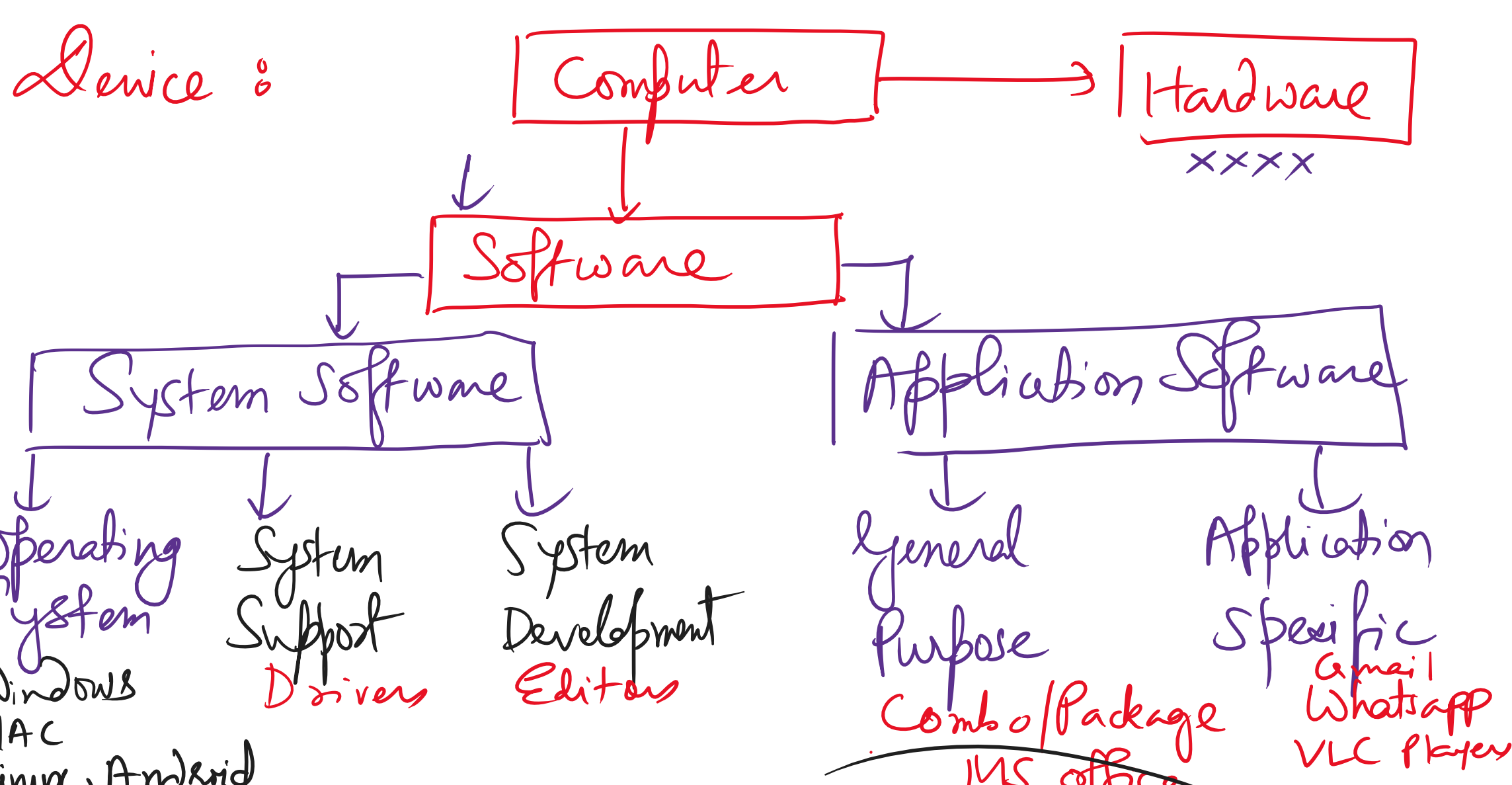
It is also called an identifier because it identifies data uniquely. Ex: a = 10, b = 20 & so on.

Person 1 → Hindi  
Person 2 → Kannada  
Person H → Interpreter  
Person K → Translator  
Mediator

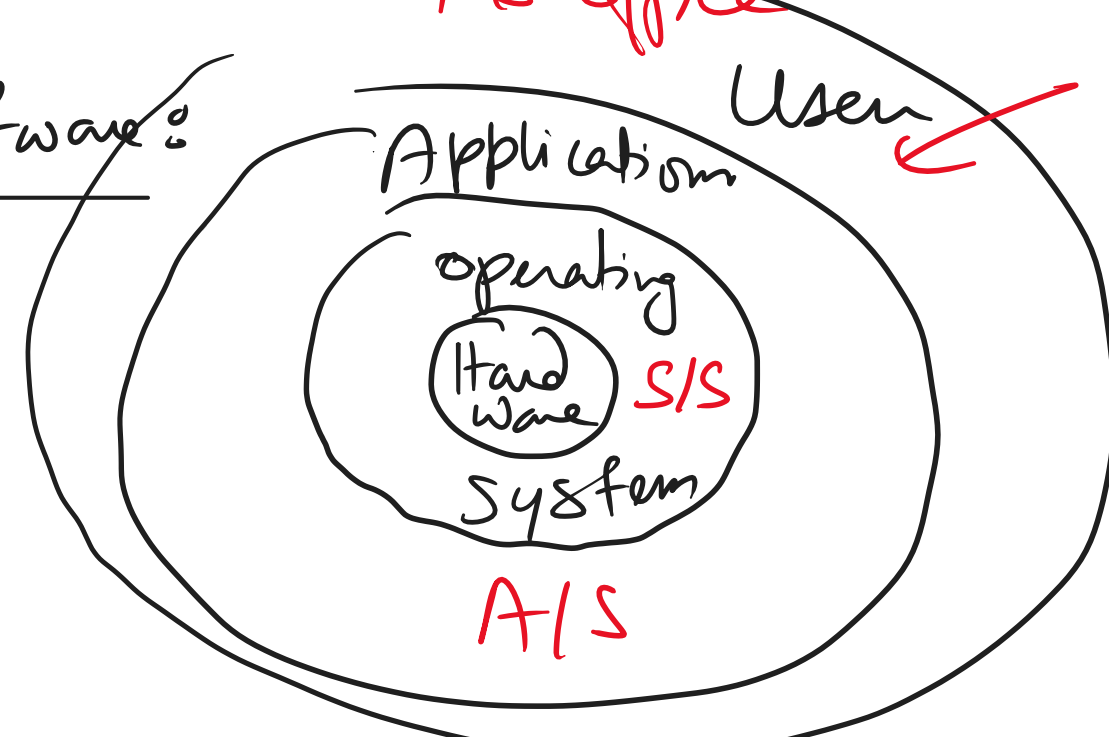
C, C++, Java, Python, SQL

user → code → System  
HLL ⇌ LLL  
Binary  
I/O

Compiler → Entity in the CPU which converts HLL to LLL & vice versa for the user & the machine to understand accordingly.



Relation b/w Hardware & Software:



\* How is a C program executed?

Header file → #include <stdio.h>  
#include → preprocessor directive  
stdio → standard input output  
printf( )

Terminal / Console Window  
Run → JSSATE

