

M/C Lang \rightarrow 0,1 \rightarrow Binary.

Assembly Lang. \rightarrow low level
commands \rightarrow

C \rightarrow functions \rightarrow functionality
HLL \rightarrow compiler \rightarrow M/C

C++ \rightarrow OOps \rightarrow Data Security Inherit- Encap Abs polyh

STORE A, 10
STORE B, 20
ADD A, B

Assembler

\downarrow
M/C Lang

class → Blueprint

Class
Person ~

variables / fields

functionality

ABC

Color
Name

House Map
→
Class

Blueprint

properties

behavior / functionality

methods

objects



B1



B2



B3

Calculator]



class

→ Simple Cal.

→ Sc. cal.

} objects

buttons prop.
=

1 + 2 = Res



[methods]

oops

→ Inheritance → P-G concept | Code Reusability

computer → 20 yrs ago
↓

P → CPU, Key, Mouse
↓ + Wires
Child → Additional
 Wires

Father

Painter
↓

Paper + Brush

Paper + Paint
Son → Painter

Add.

Slw Tools

Ind Polymorphism

CPU - power button

Laptop s

area (int c)

area (,)

(III) Abstraction :- Class Hiding /
↓
Classes → can't create an object

To reduce Complexity

(IV) Encapsulation → Data Security



Binding

variables
prop + methods.

private a;
↓
method()

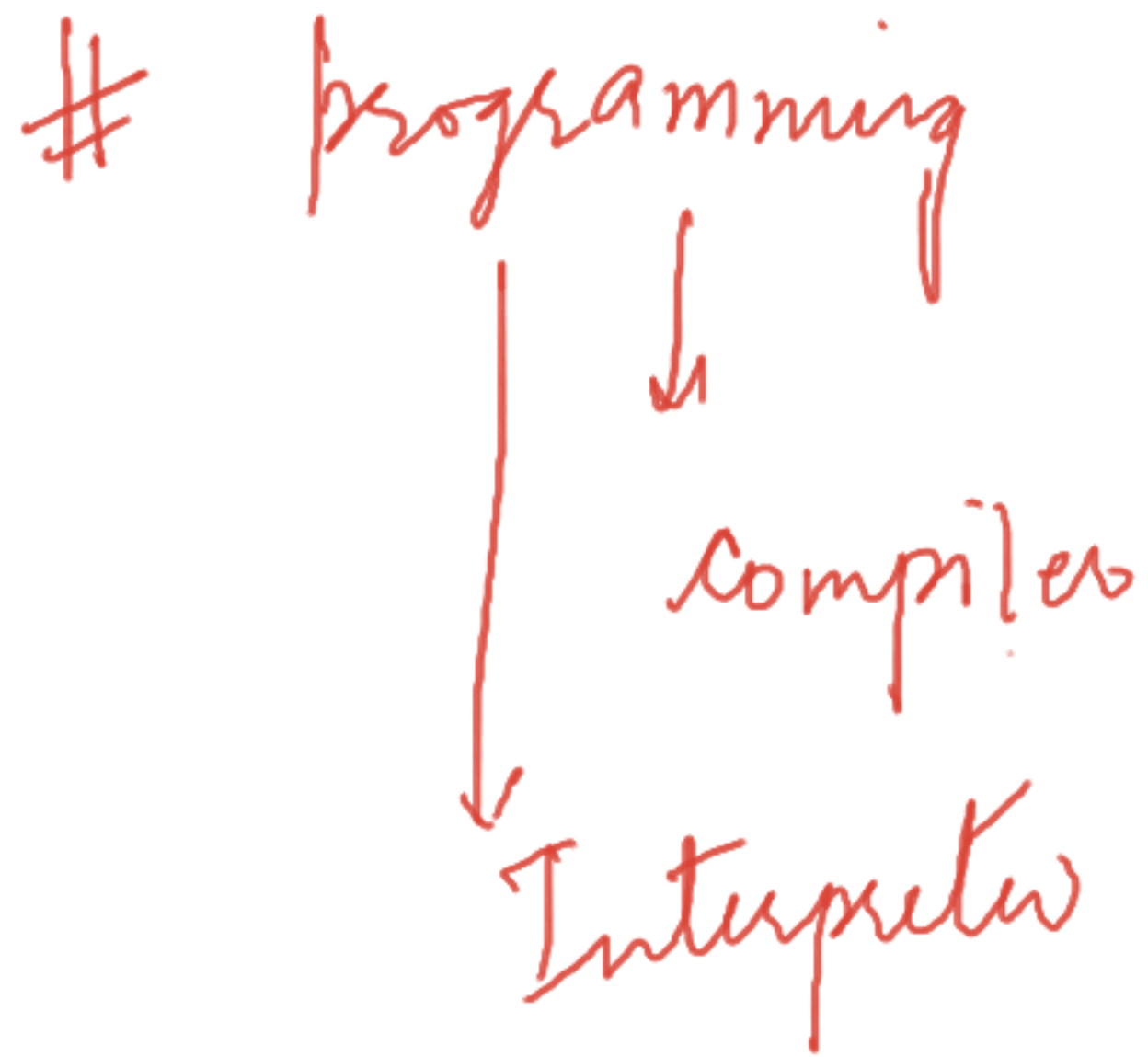
Class A {

private a;
public void m1() {

private keyword

}
}

Class B



scripting

Interpreter

platform
independent

Windows

Source Code

✓ Test.java)
class A

javac Test.java ← compiler

byte code

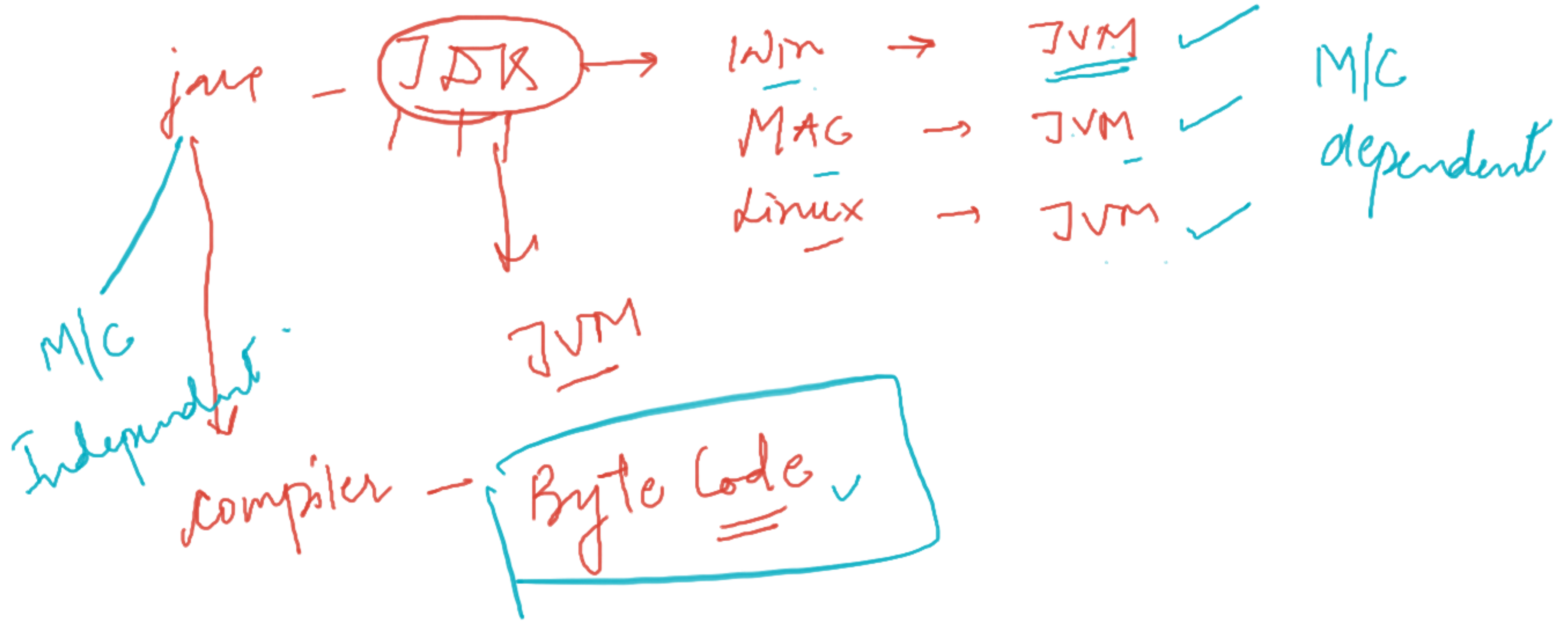
className
↑
_ . class
A . class

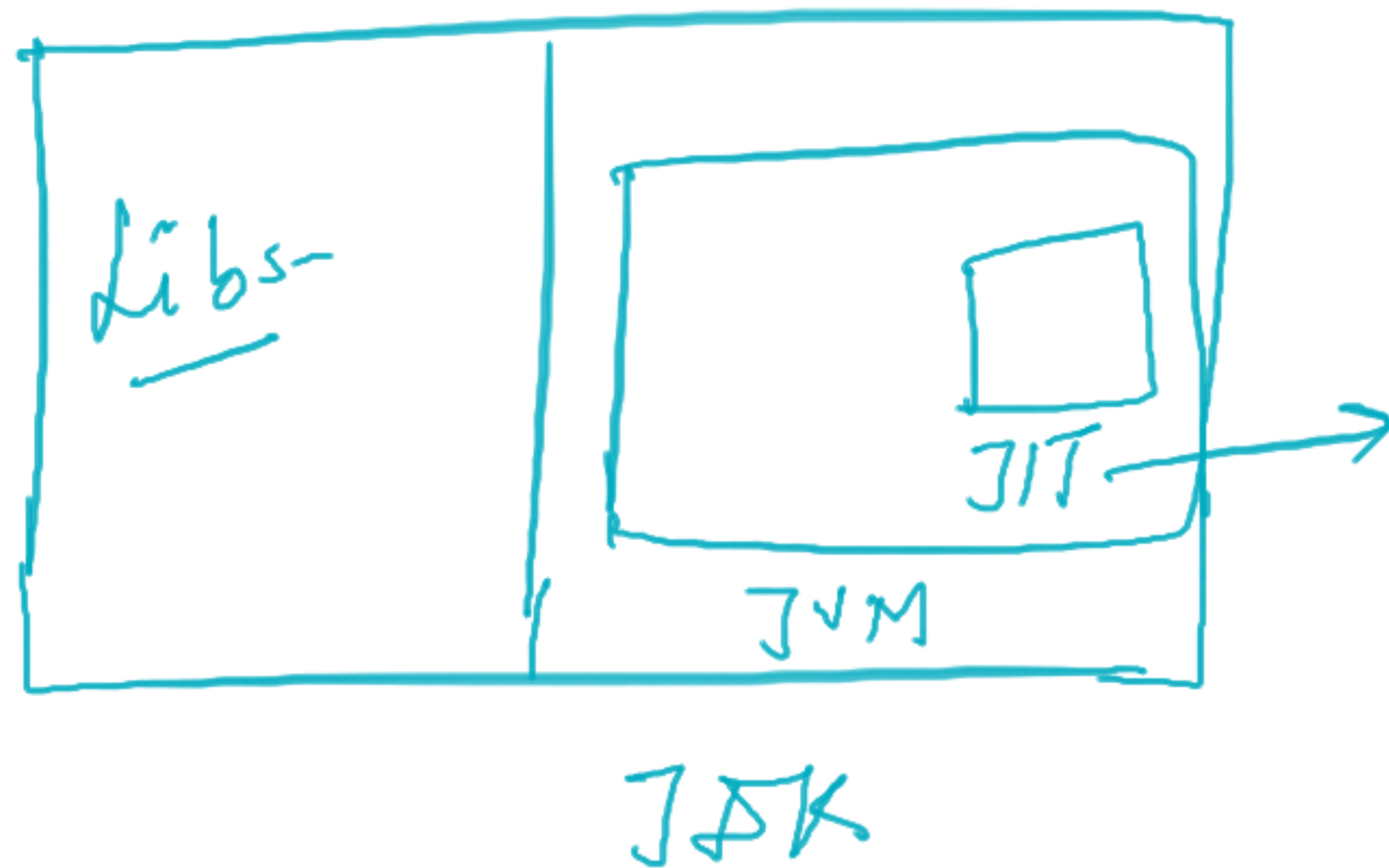
MACOS, linux

Q: why?

is JVM?

platform dependent





just-in-time
↓
H.P.

int a = 10;

P

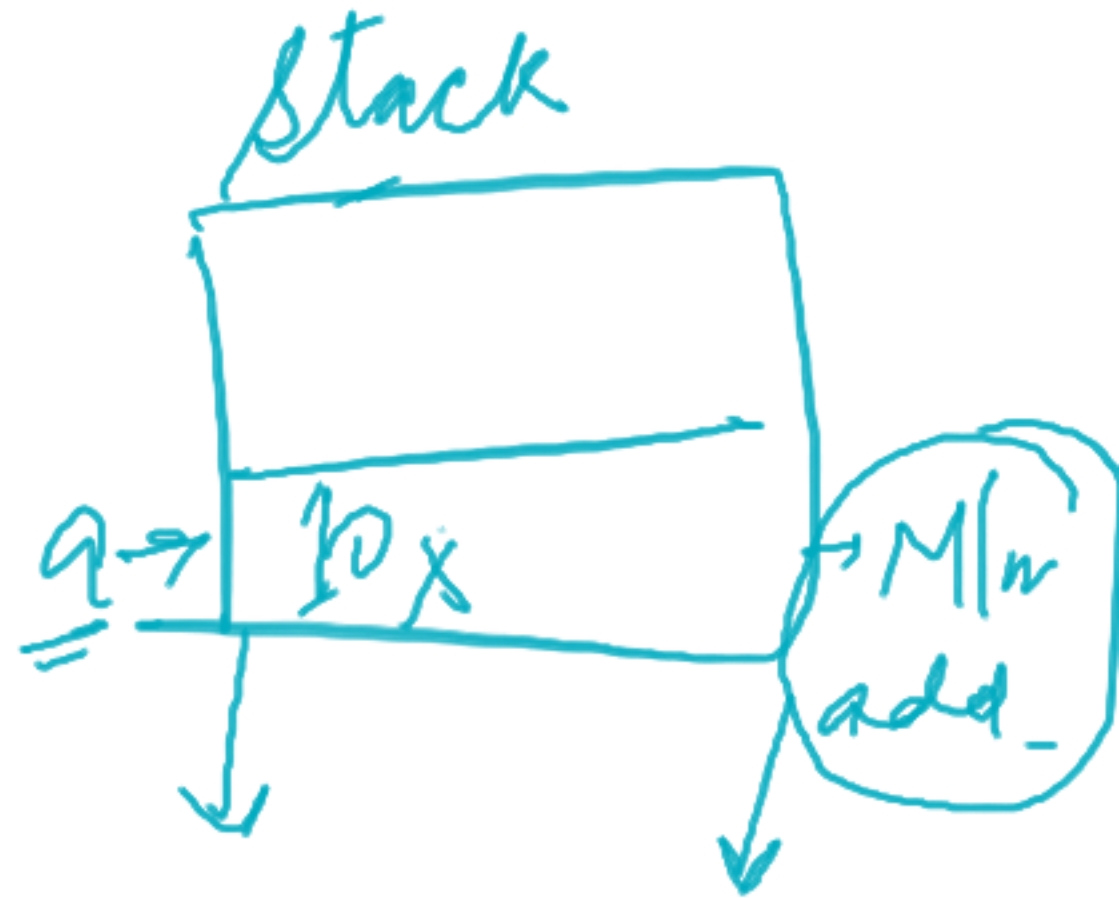
= & (.) ;

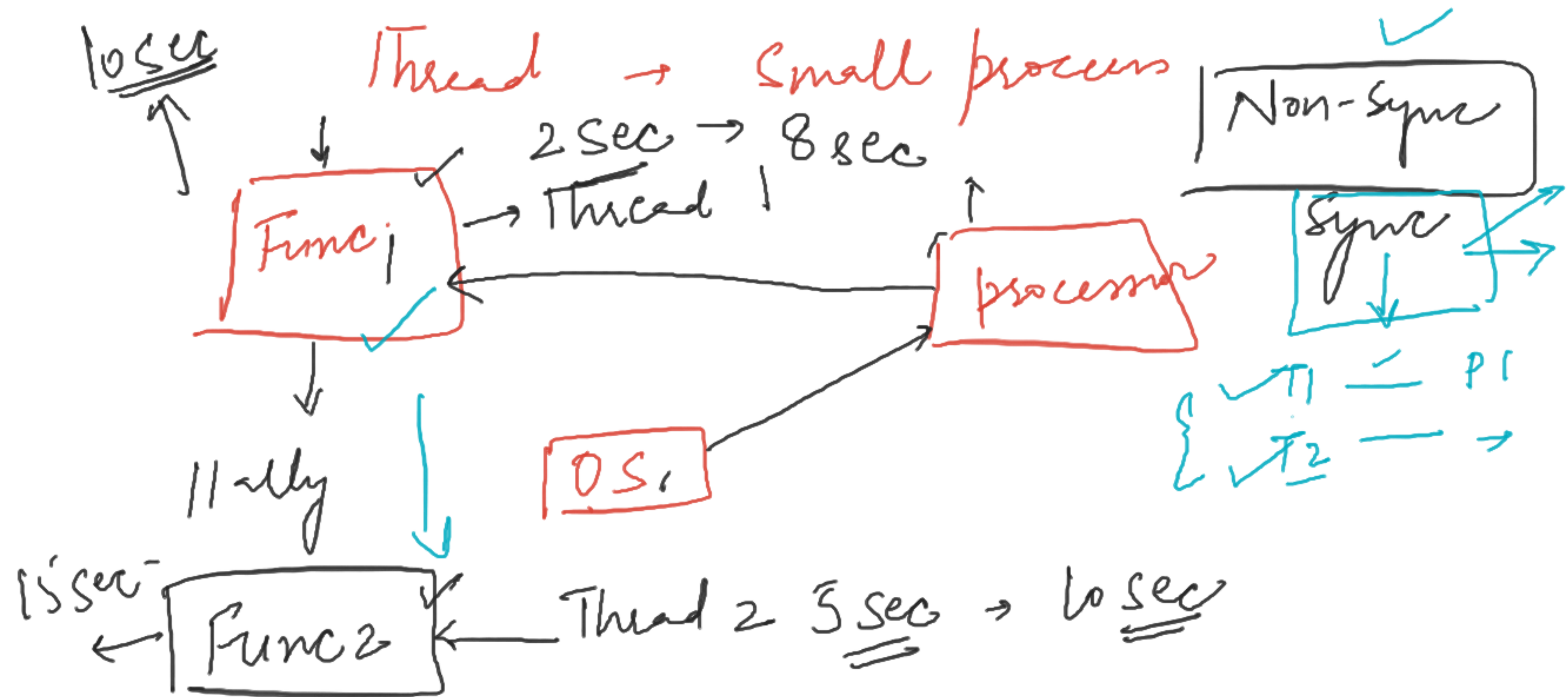
↓

↑ char

P -

char b





method & function →



oops



Independent

Class A {

public void m() {

}

A a = new A();

} a.m();

A.m();

{ function f() {
add
}

add();

Code Execution

JDK 18

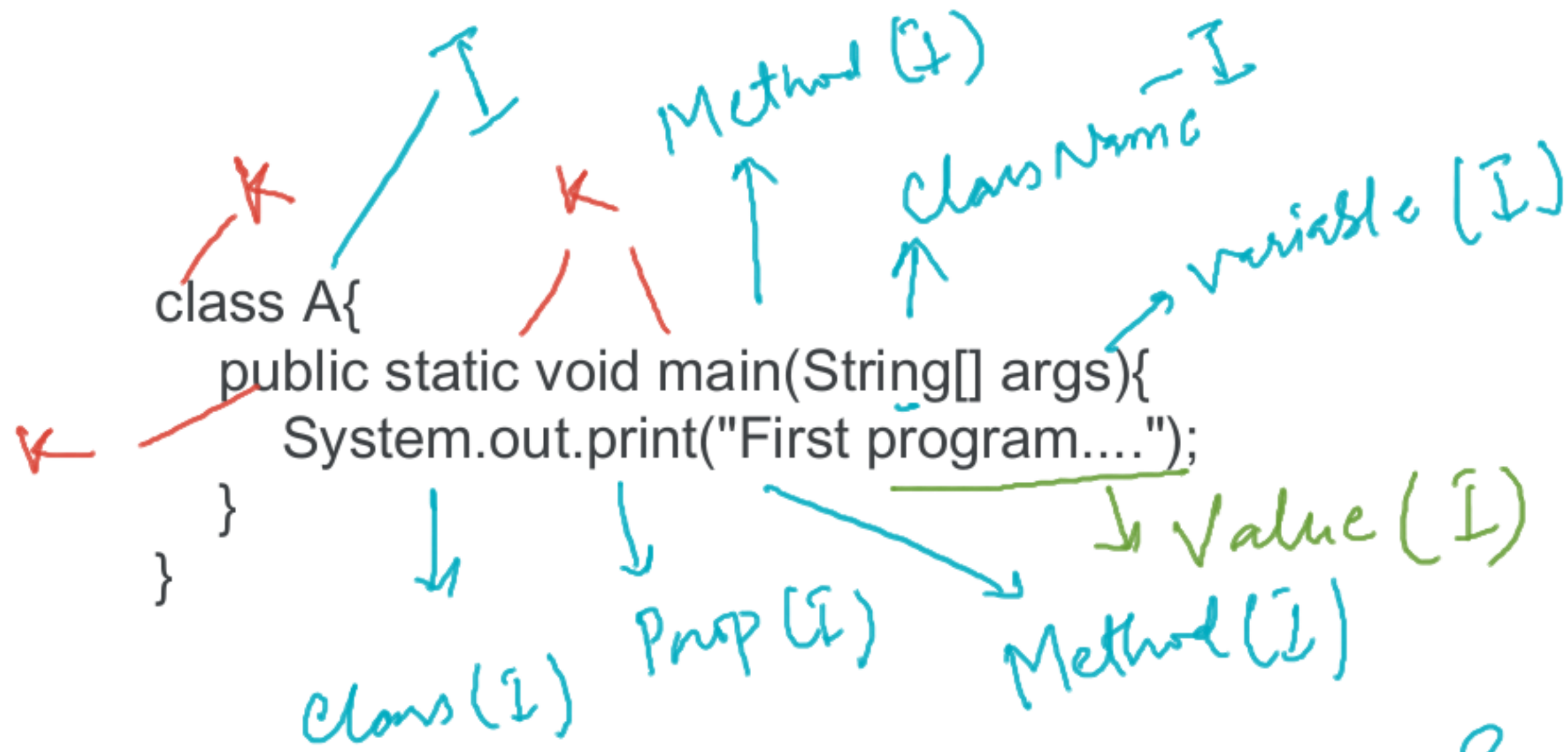
→ JDK 8 ClassName - A
 ↓
 FileName - Test.java }

javac <filename>.java.
 ↳ <classname>.class - byte code

→ java <classname>

java Test.java

↓
O/P .



- Keyword
- Identifier ✓
- Literals ✓
 - if-else
 - switch
 - case
 - break -
 - continue
- Class Name
- Method
- Var Name

JAVA →
③ Built-in Literals
values
true | false | null

int a = 10
↓
d
↓
k
↓
I
↓
literal

- ① class Name & fileName - Same } with public
 (2) " " - diff. } without public

✓
 public class A {
 Test
 }

	CN	FN
public	Test	- Test
	Test	- A

without
 public