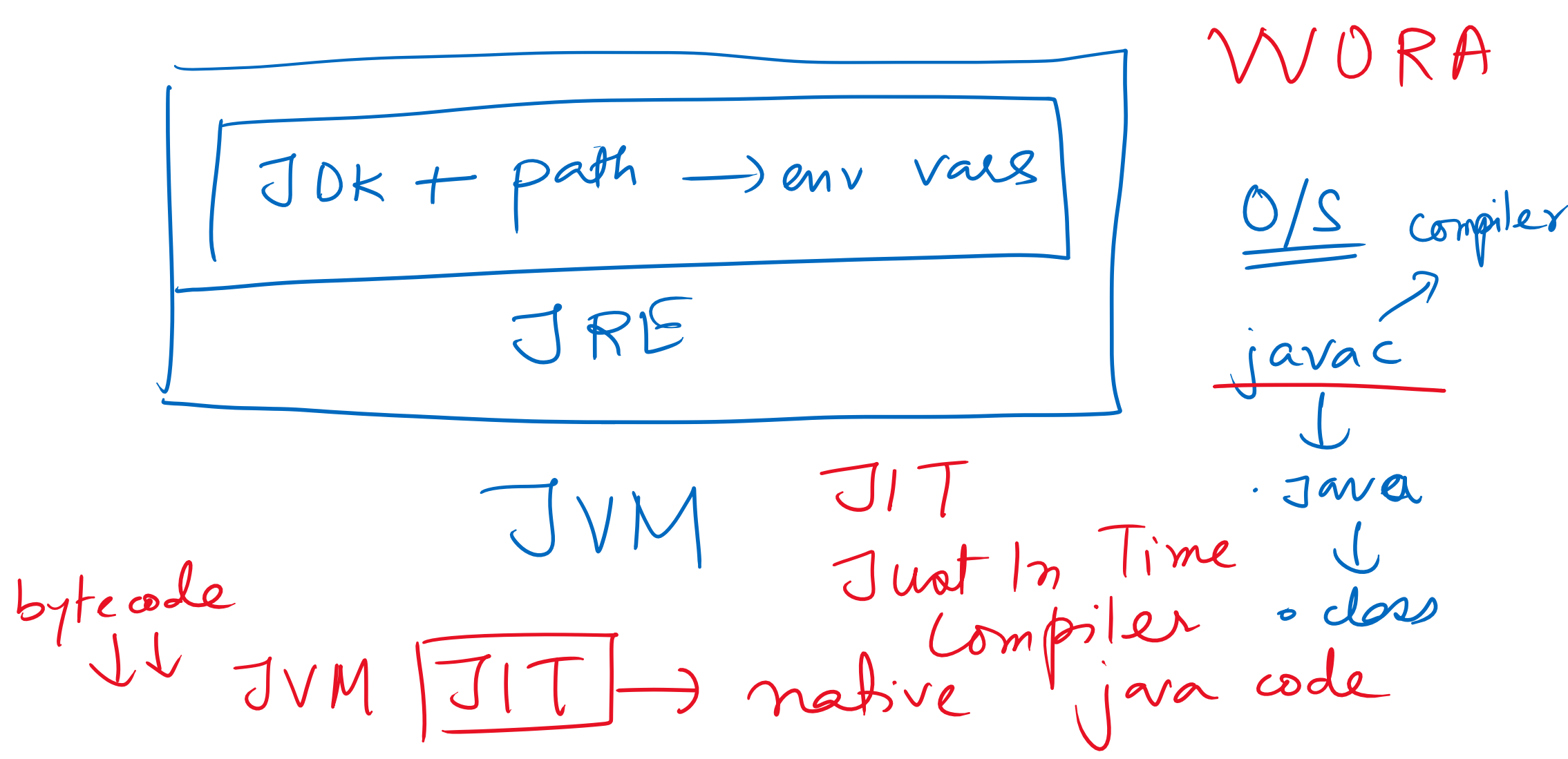


WORA \rightarrow Write Once Run Anywhere



↳ It can only be public or **default** ^{Instantiable} objects

Name	Inside class	outside class	Inside Package	Outside Package	Objects

→ ^{default} className () → syntax of constructor
↓
- init

→ There can be multiple constructors in a class → Polymorphism

→ In C++ → ~className() → destructor

→ In C++ → ~className() → destructor
In Java → No destructor → JVM

Types \rightarrow Default / no-argument constructor
Parameterized Constructor ✓

1 → 5 lines
100 → 700 lines → DRY

final var not initialized → Constructor
static final var " " → static {}

Static

Obj1 \rightarrow IIB 108 or 109

Obj2 \rightarrow IIB 106 \rightarrow main() \rightarrow not mandatory

\rightarrow IIB \rightarrow static { } inc db files

107 \rightarrow main() mandatory

Use of the this keyword \rightarrow current class
super keyword \rightarrow parent class

```
Parent class A {
    int x = 10;
}
```

```
child class B {
    int x = 20;
}
this.x
super.x
```

OOPS Pillars : Encapsulation (I)
Inheritance (II)

Inheritance (11) Hybrid

interface implements A, B, C

Interface → M I

Single Multi Level Hierarchical

Multiple Inheritance Not Supported

3. Abstraction → Polymorphism → Multiple Inheritance → Not Supported

4. Association → Ref'n → Can a class extend multiple classes? → No

→ Application

Car } Tight Coupling
 Engine }
 Car } Loose Coupling
 Mp3 Player }

Composition (Inheritance)

Patient

name
age
doc
dis

Information

block No
floor No
room No
bed No

Payment

adm Fees
reg Fees
bal Amt

patient Details ()

$$p_1, p_d(\cdot) \longrightarrow op$$

Constraints:

Just NO use of external keyword allowed.

Aggregation \rightarrow HAS - A Relationship

Composition \rightarrow IS - A Relationship

Comparison: $\frac{1}{2} \leq 18 \leq 19$ (2015, 2016)

Employee has a address.
b is a animal

Dog is a animal:

File Handling - , files | | class | write