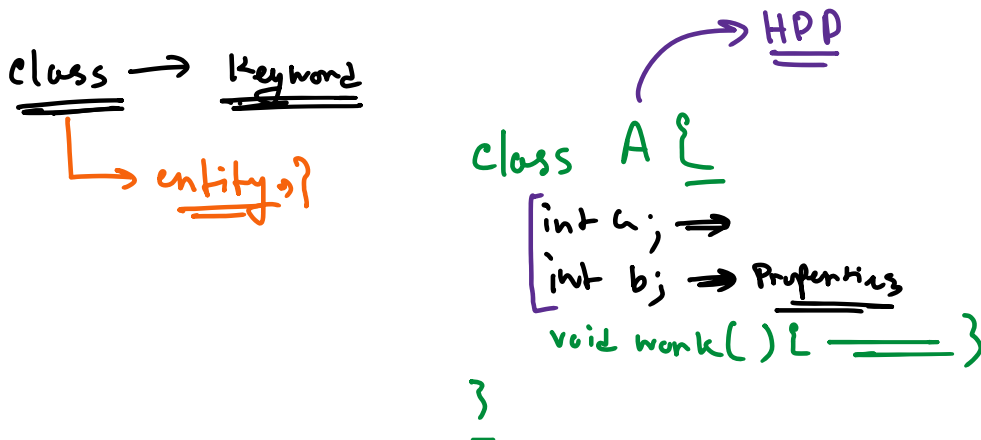


OOP (Object oriented programming)

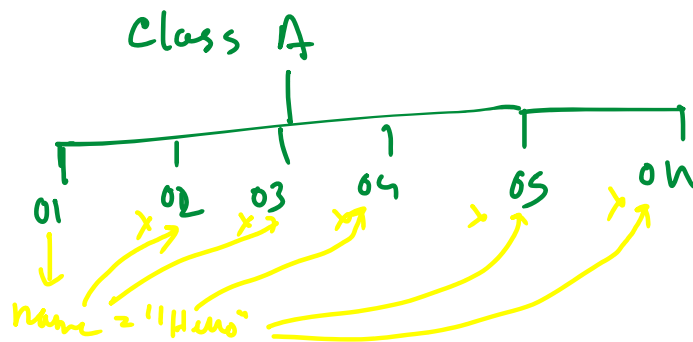
What is class?

diff class & object?

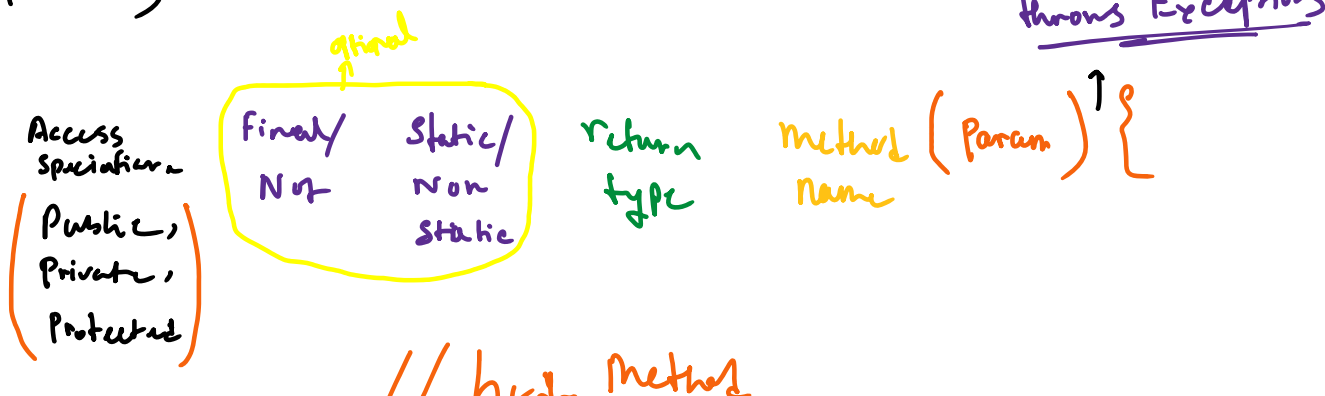


Object → RAM (Heap memory)

Class $\xrightarrow{\text{Ref}}$ Object
→ using Object you can modify



Method (Function)



(Protected)

// body method

}

Example

```
public final static void print (String message) {  
    s.o.p (message);  
}
```

this ?

class A {
 int number;
 void work (int number) {
 s.o.p (this.number);
 }
}

class level

local

Static

class n. i. s

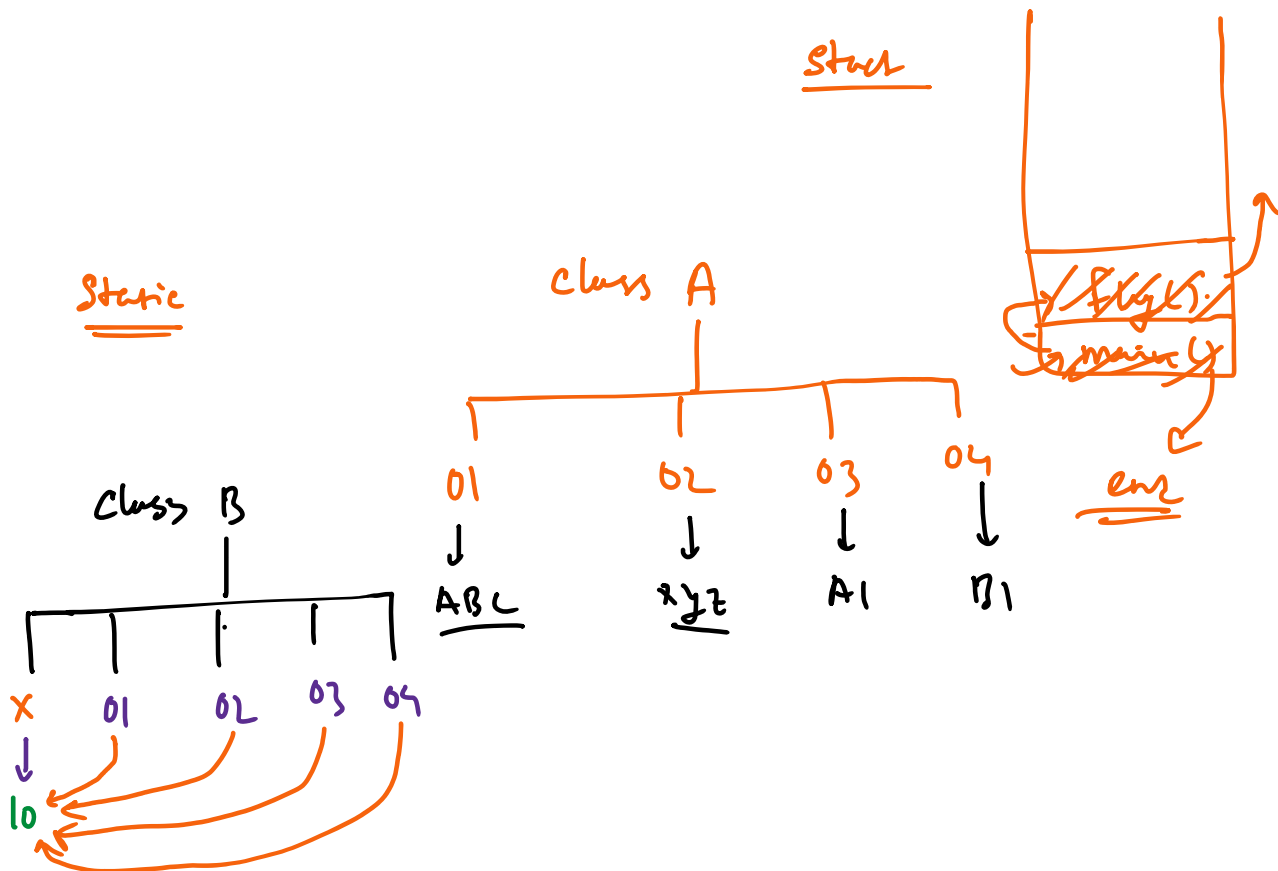
```

class Bird {
    static void eat ( ) {
        s.o.p("eat bugs");
    }
}

```

object
 ↓
 eat method
 ↓
Bird.eat()

Static ⇒ Stack memory ⇒ Object ⇒ Heap memory



Recursion

method call it's self

void Print () → recursion

```
void Print (int value) {
    // base condition

    // calculation
    // recursion call
}
```

10 → 1

Fun(10)
↓ ↑
Fun(9)
↓ ↑
Fun(8)
↓ ↑
Fun(7)
↓ ↑
Fun(6)
↓ ↑
Fun(5)
↓ ↑
Fun(4)
↓ ↑
Fun(3)
↓ ↑
Fun(2)

Print
10
9
8
7
6
5
4
3
2
1

```
void fun (int value) {
    if (value == 0)
        return;

    fun (value - 1);
    s.o.p (value);
}
```

