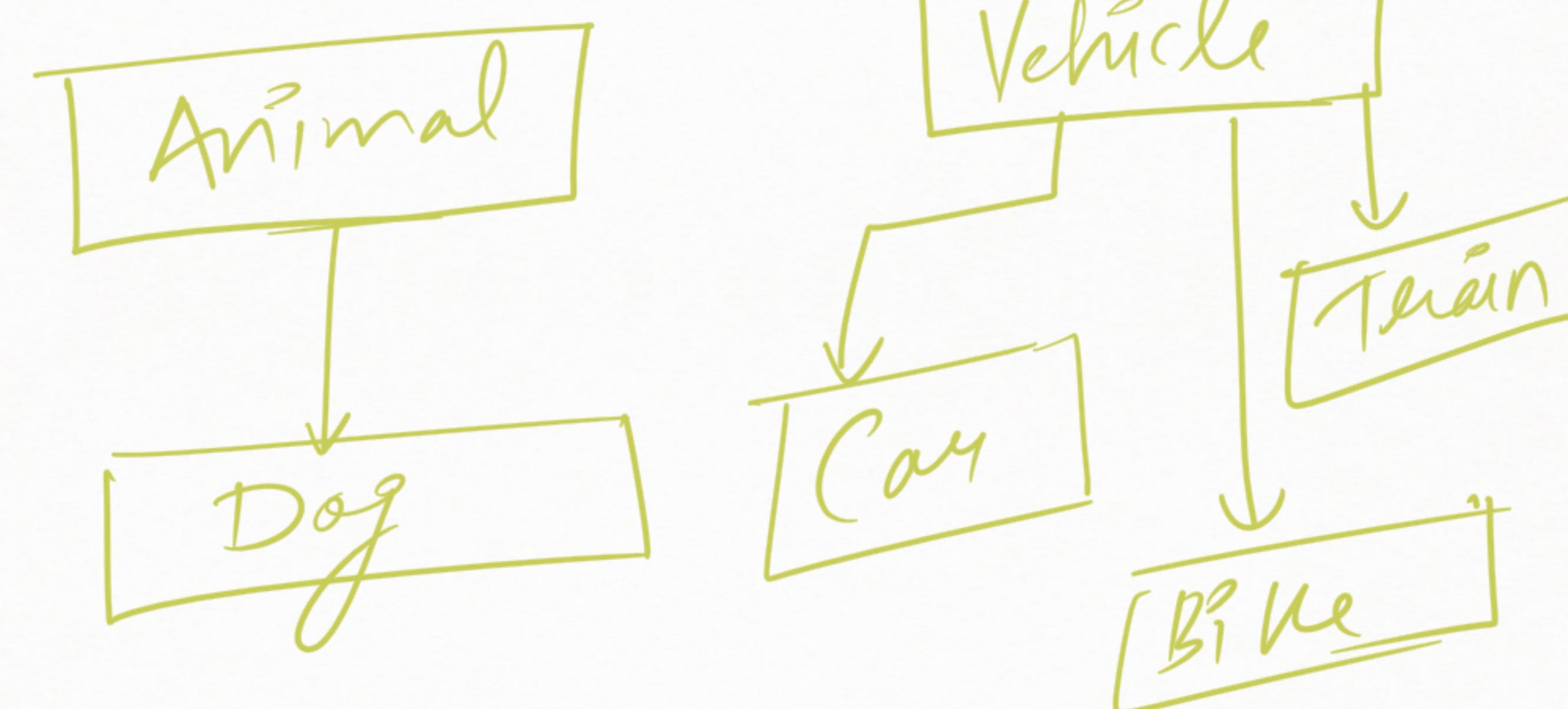


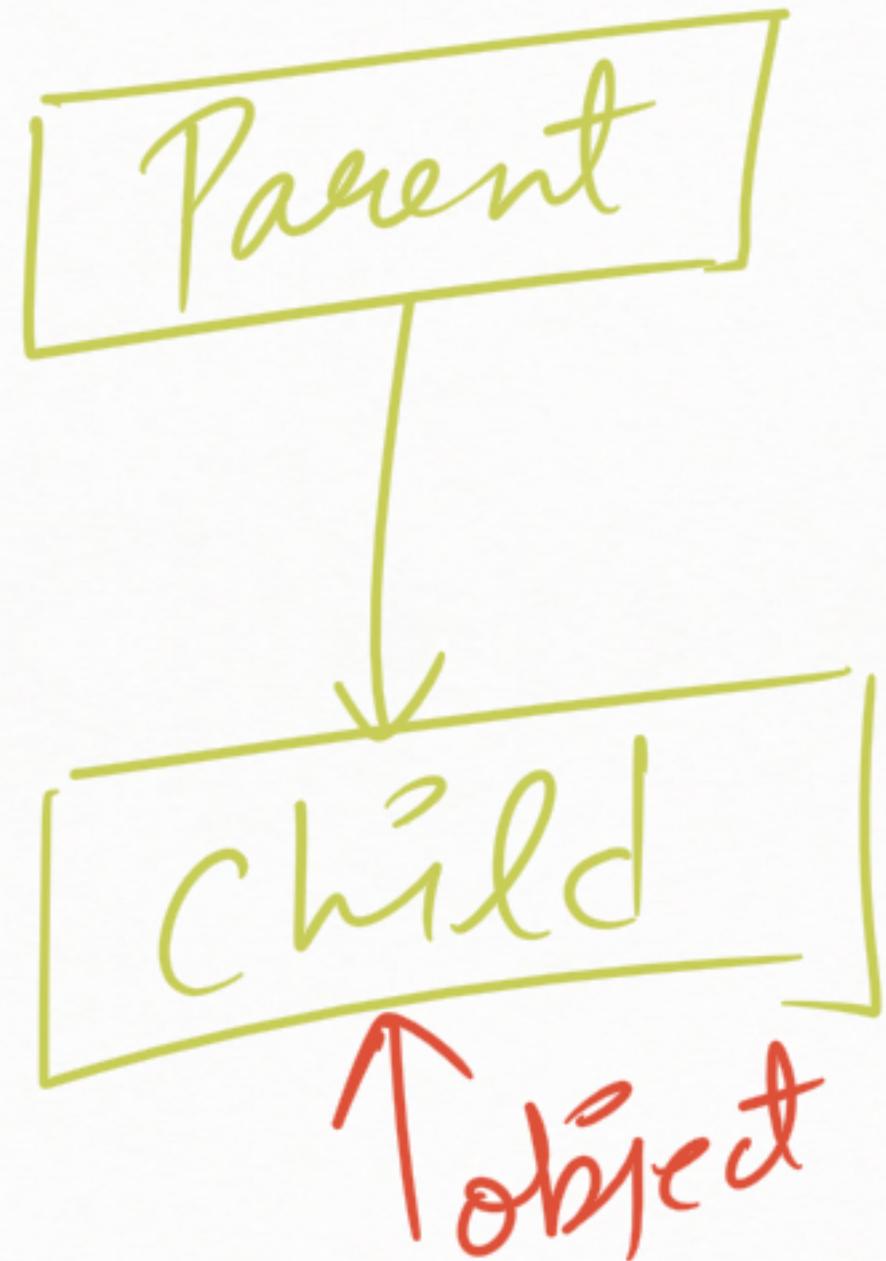
Inheritance
Deriving properties and methods from
existing class



Types of Inheritance

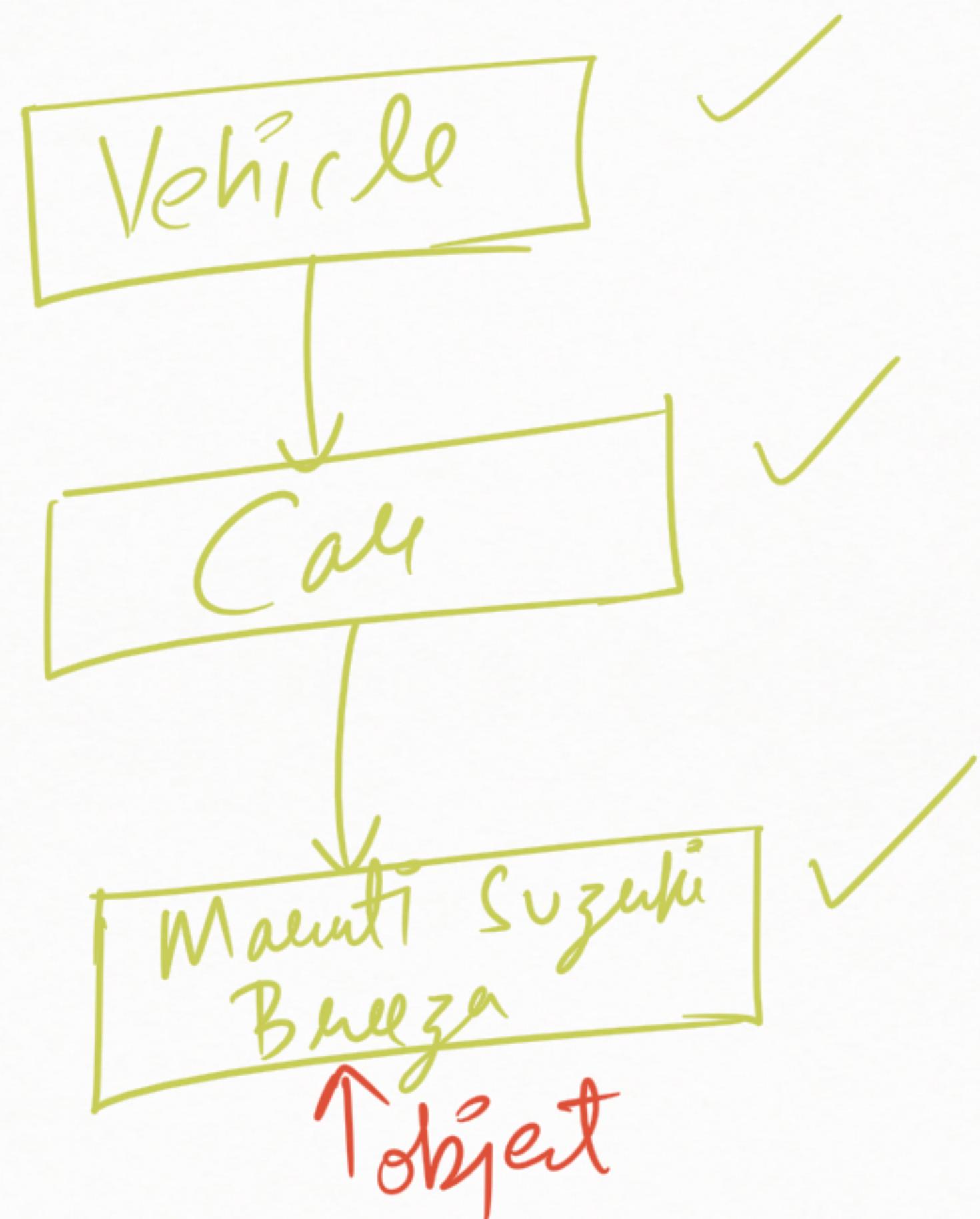
① Single Inheritance

MRO of object
child
Parent



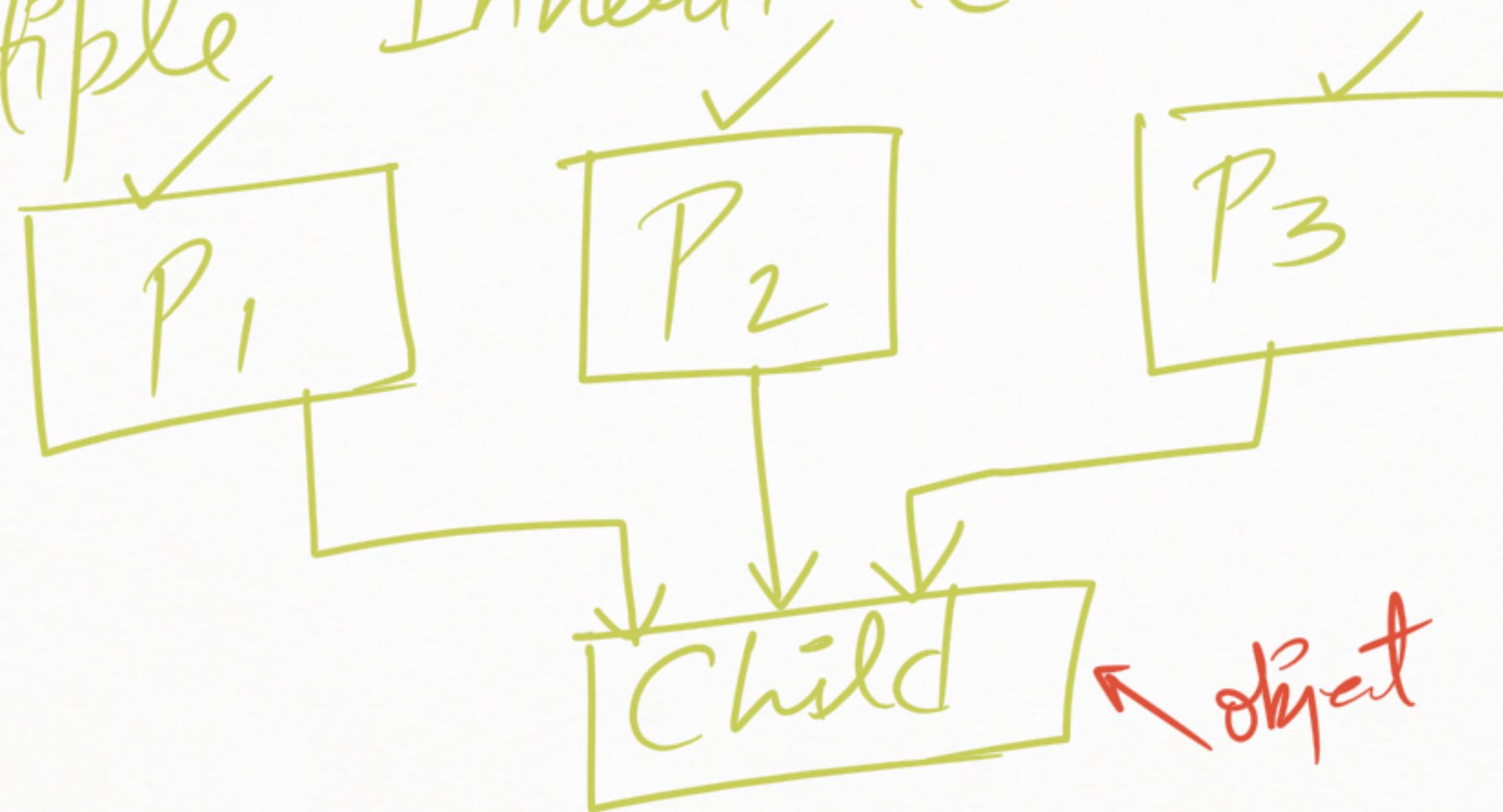
② Multilevel Inheritance

MRO of object
Maruti
Car
Vehicle



③

Multiple Inheritance



Child(P_1, P_2, P_3)

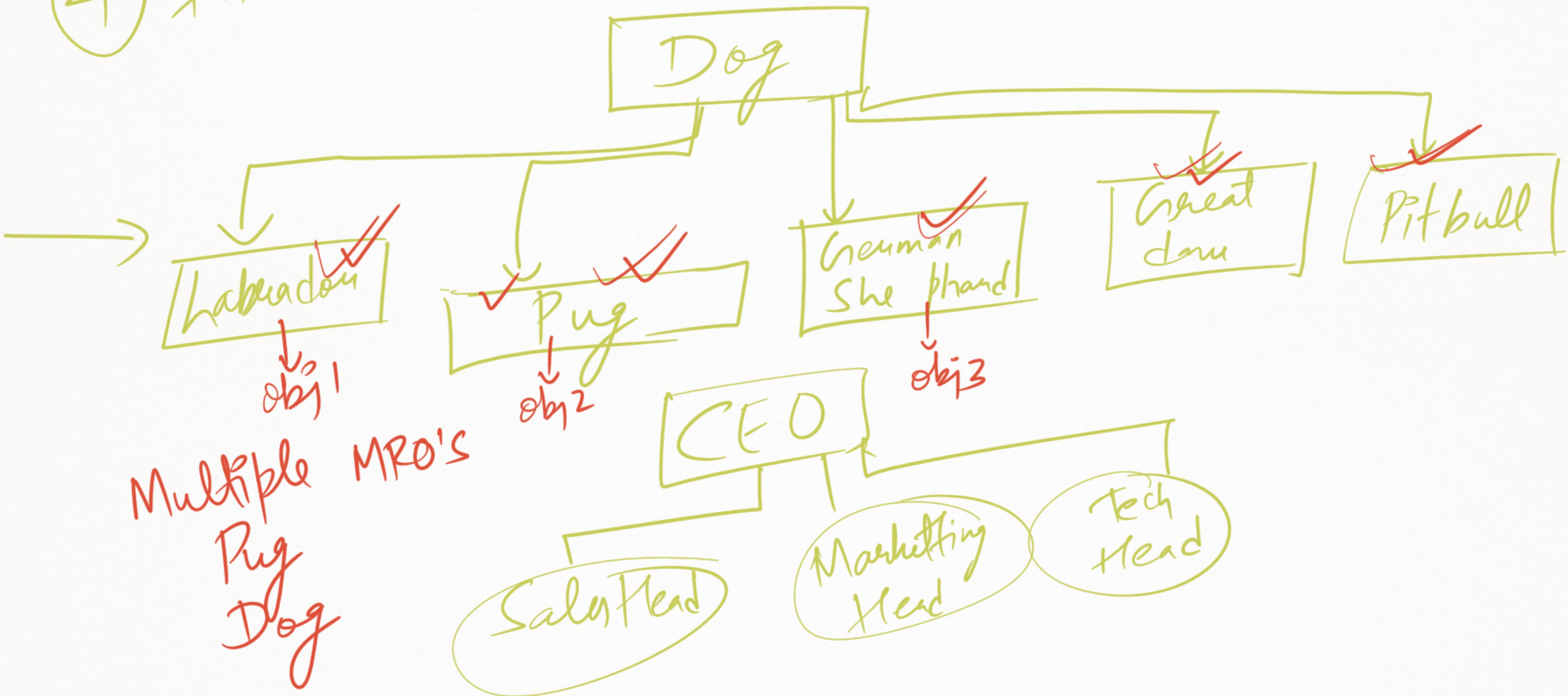
Child(P_2, P_1, P_3) →

Child
 P_2
 P_1
 P_3

MRO of object

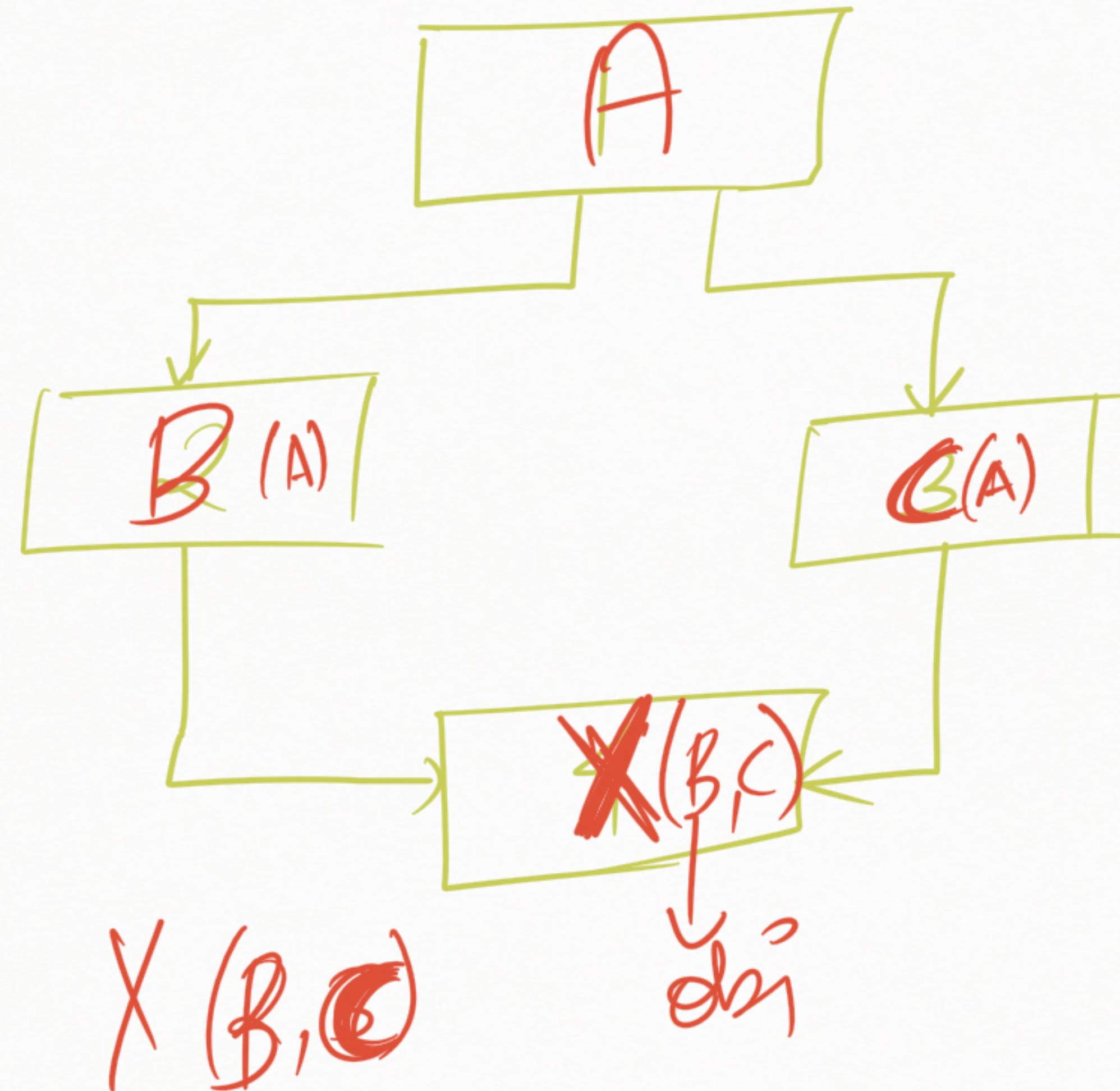
Child
 P_1
 P_2
 P_3

④ Hierarchical Inheritance



⑤ Hybrid Inheritance

MRO of obj
4 X ✓
2 B ✓
3 C ✓
1 A ✓



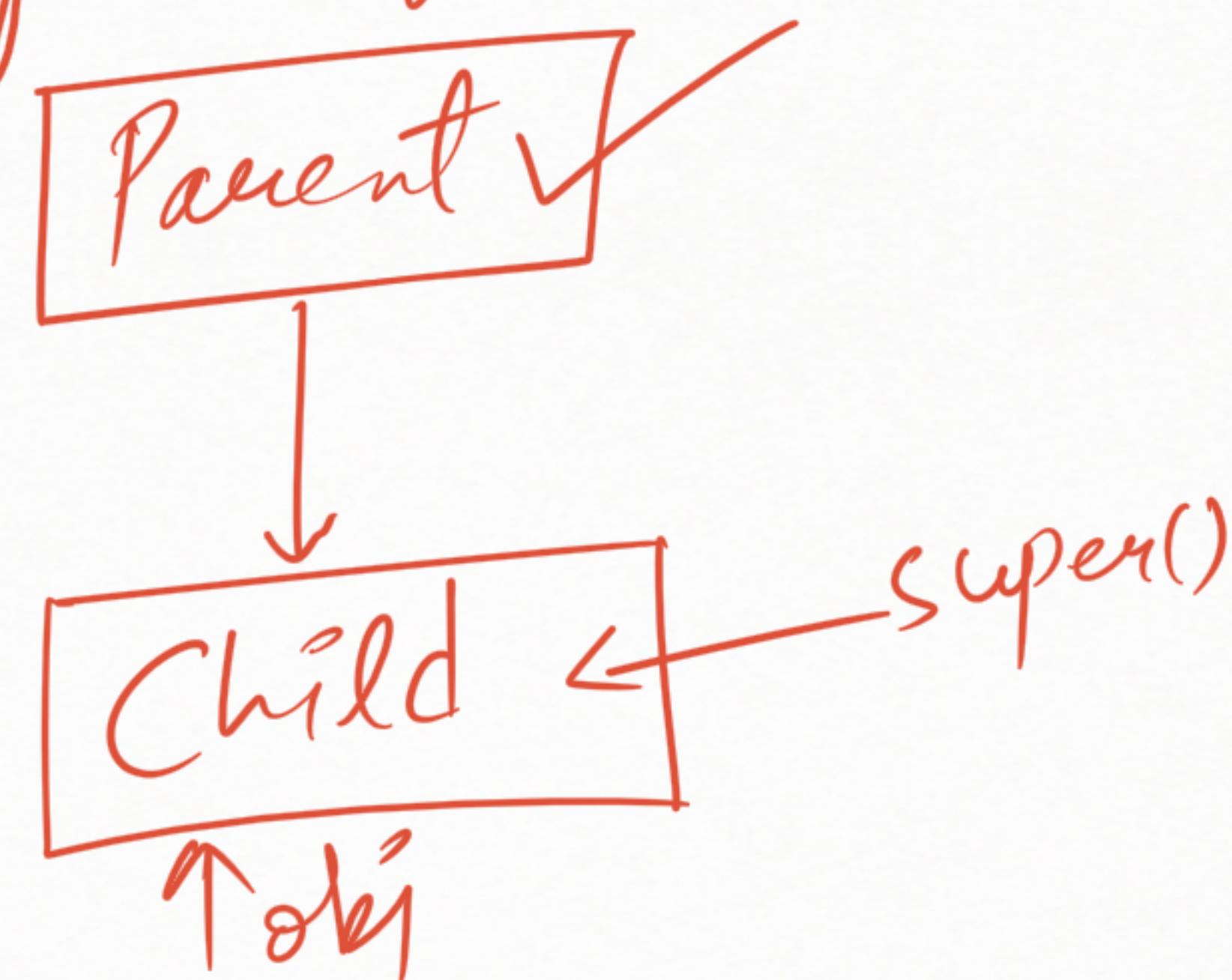
Method Resolution Order

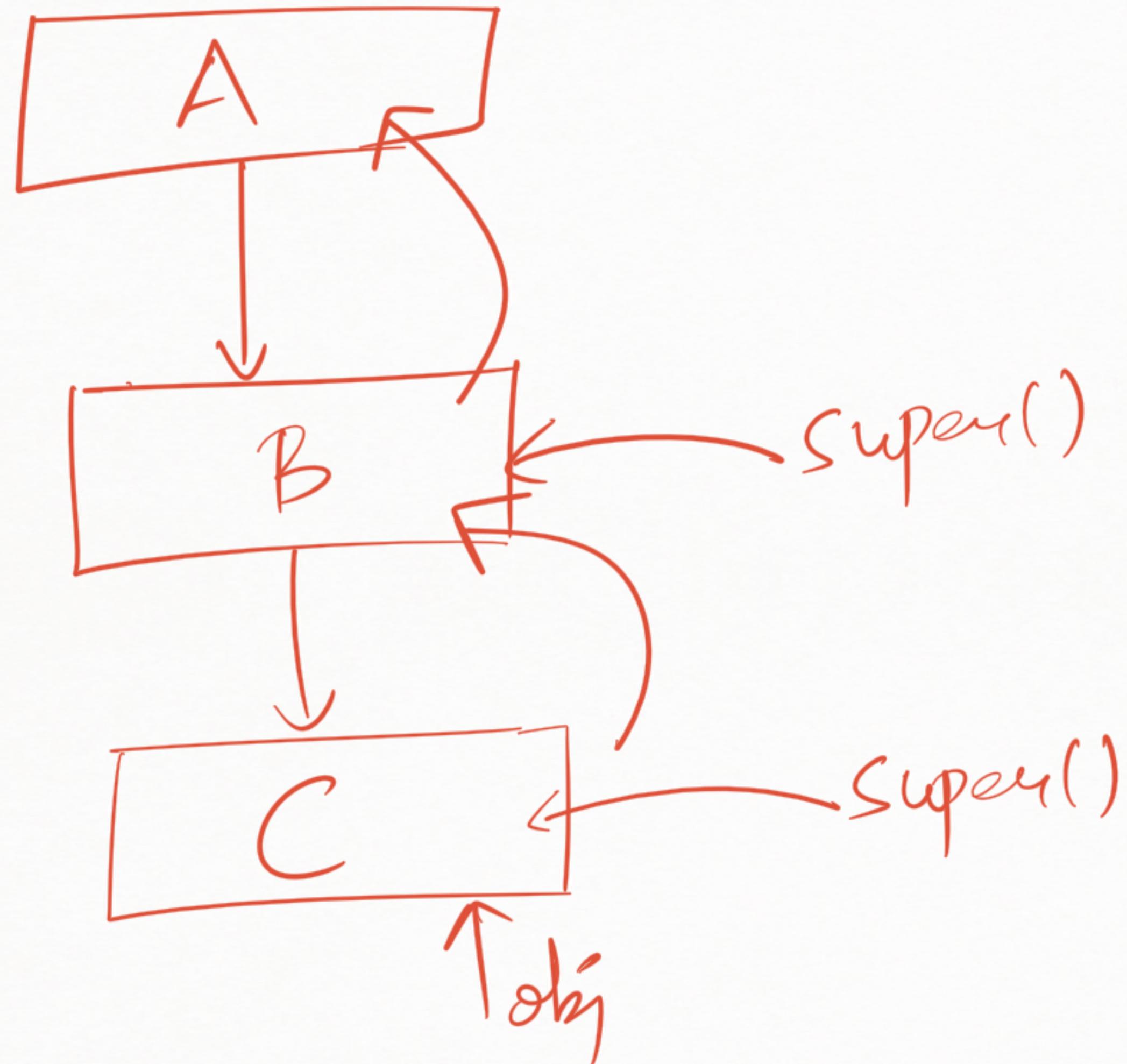
→ When you try to access method of an object like $x.y()$ than where would it find y if it is not present in the same class

Super() Keyword

Super() keyword give access to
the class of higher MRO order

MRO
Child
Parent





MRO

C
B
A

1

2

3

4

MRO of obj

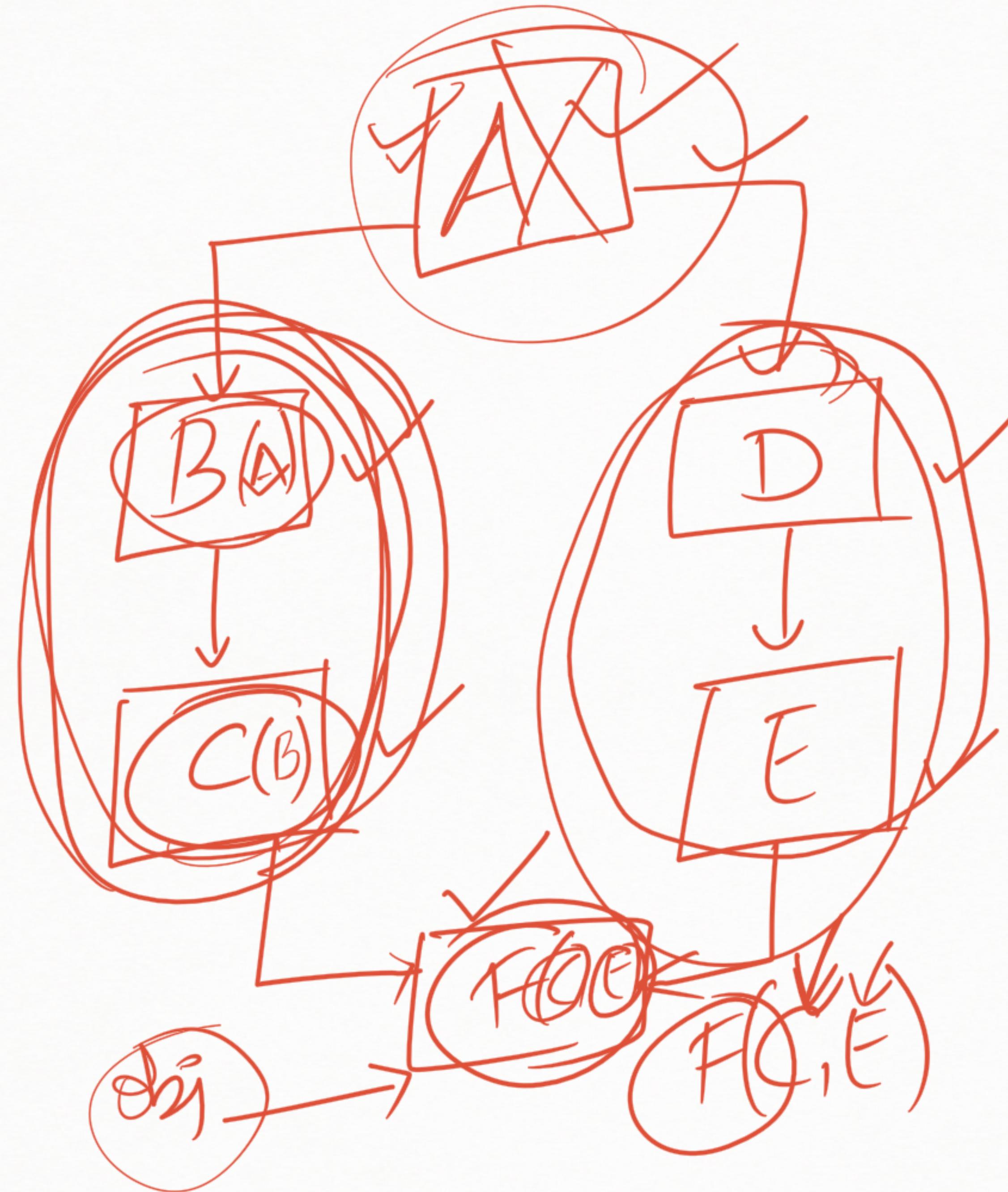
45
15
25
35

4(1, 2, 3)

obj

MRO?

F ✓
C ✓
B ✓
E ✓
D A



Depth
First Left
to Right

F
E
B
D
A