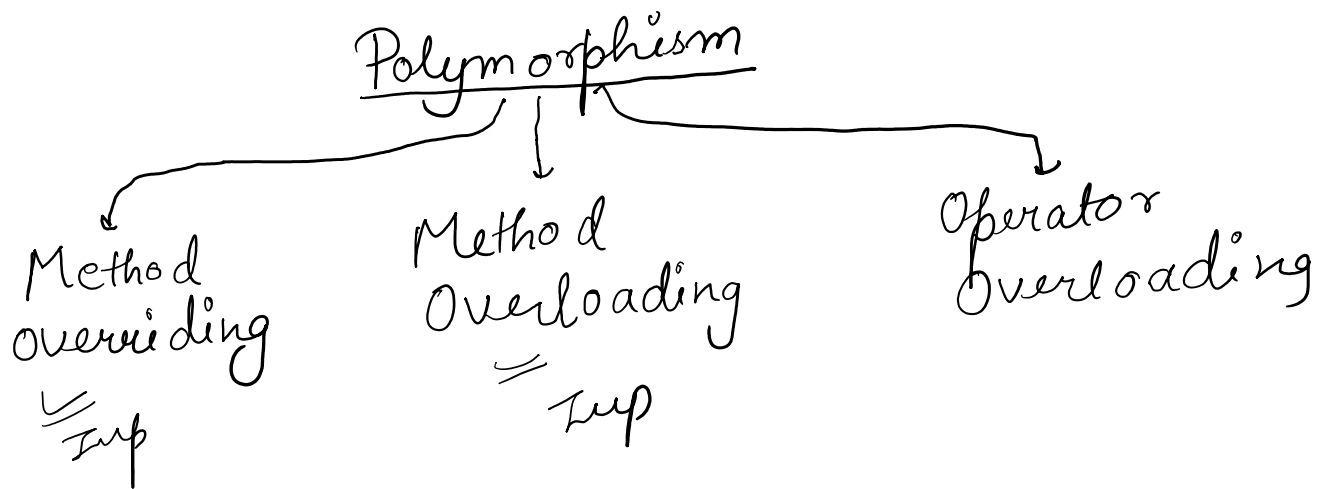
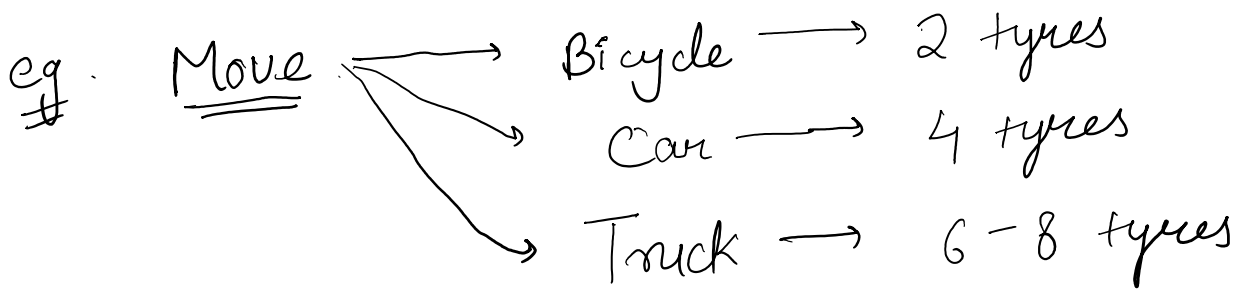
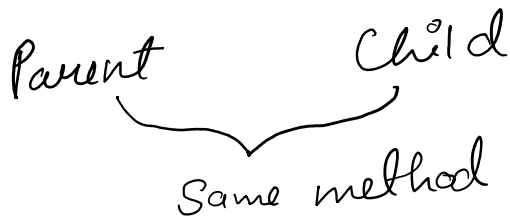


Ability to exist in different forms.



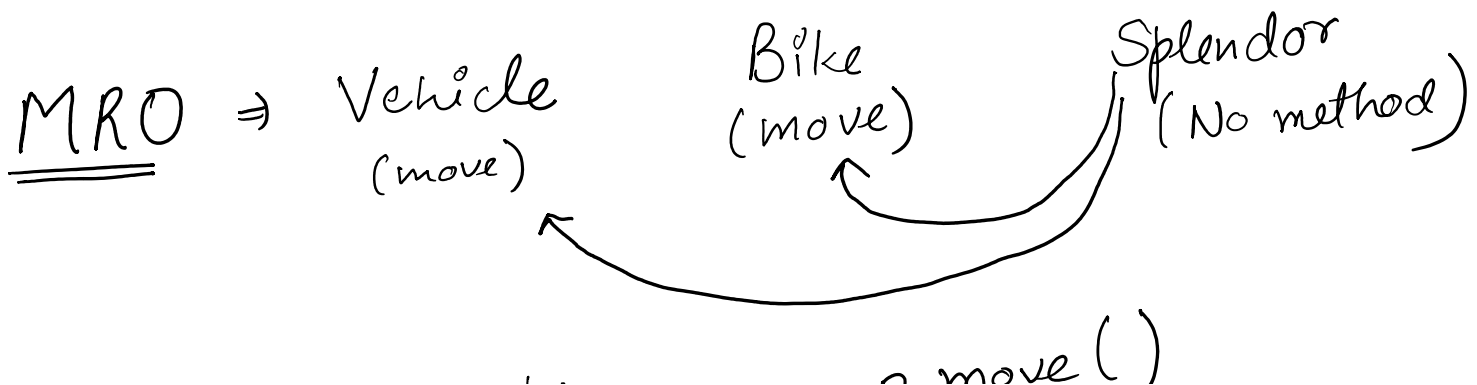
① Method Overriding



Parent
move
X

Child
move
≡

Obj of child → call method → Child wala method hi call hoga



$\text{obj}(\text{splendor}) \rightarrow \text{sp.move}()$

$\text{class Splendor}(\underline{\text{Vehicle}}, \underline{\text{Bike}})$

Method call (move) \rightarrow Vehicle^* Bike Splendor \rightarrow MRO (Method Resolution Order)
Order in which classes are searched

Current class \rightarrow MRO.

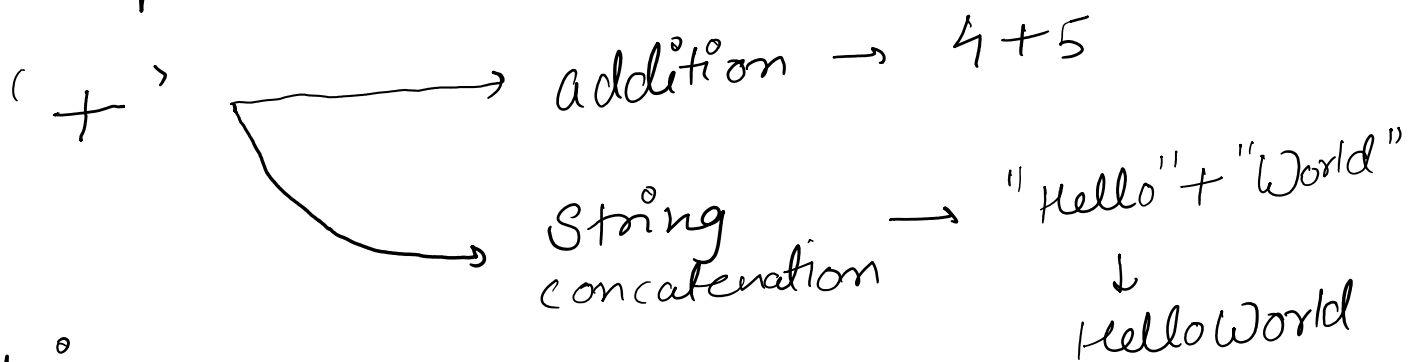
② Method Overloading (Not exist in Python directly)

Calculate area \rightarrow Square \rightarrow side (1) $\rightarrow (\text{side})^2$
Rectangle \rightarrow l, b (2) $\rightarrow l \times b$

Indirect way \rightarrow (Default parameter) $\underline{a, b}$

Square
1 param
(a) \rightarrow $\left\{ \begin{array}{l} a = \checkmark \\ b = \text{None} \end{array} \right.$
Rectangle
2 param
(a, b) \rightarrow $\left\{ \begin{array}{l} a = \checkmark \\ b = \checkmark \end{array} \right.$

③ Operator Overloading (special case of MO)



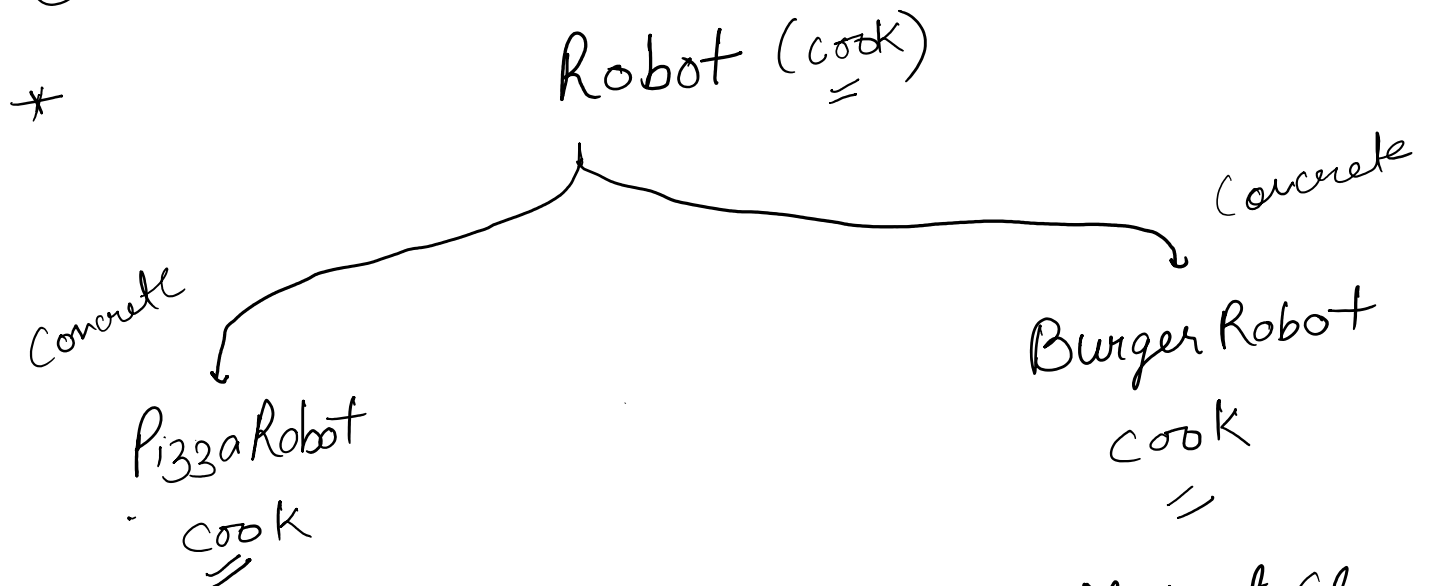
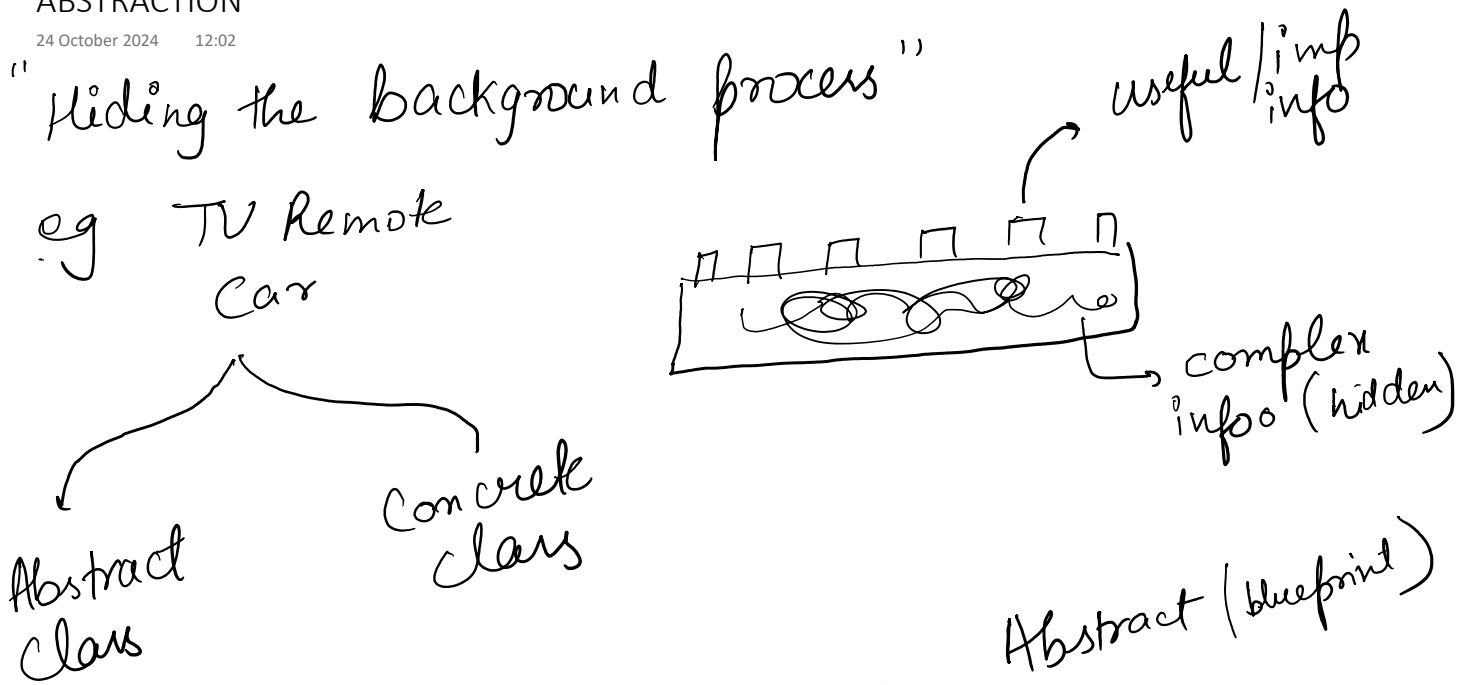
Using
magic methods

-- add --
-- sub --
-- mul --

{ When u apply MO
on magic methods
we call it operator
overloading }

ABSTRACTION

24 October 2024 12:02



- ① You can not create object of Abstract Class
- ② It is compulsory for all concrete classes to have all abstract methods