

Lec3 : Inheritance and Polymorphism

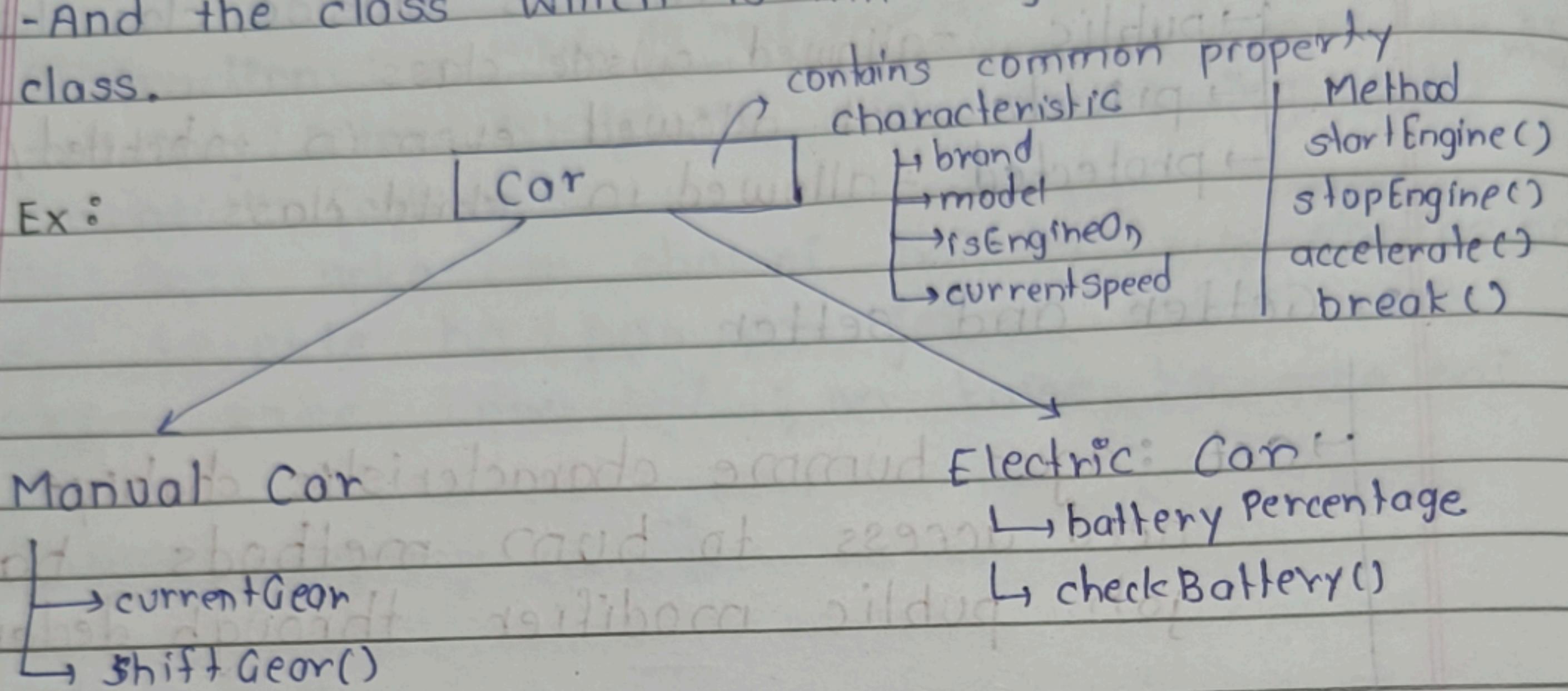
Polym

What is Inheritance? (Parent-child relation)

- Inheriting of properties and behaviours from another class (which will be called as parent class)

- And the class which is inheriting is called child class.

Ex:



How does class inherit

class ManualCor : public Cor

↳ this tells how the fun class is getting inherited

if it is public (used 99%)

↳ toh sooreni method and characteristic of parent class will behave same & like agr koi waha private hai toh access hi nhi hogya agar public hai toh public & protected hai toh protected

if it is protected

↳ private : access X

↳ protected : protected

↳ public : protected

if it is private

↳ No access : private

↳ protected : private

↳ public : private

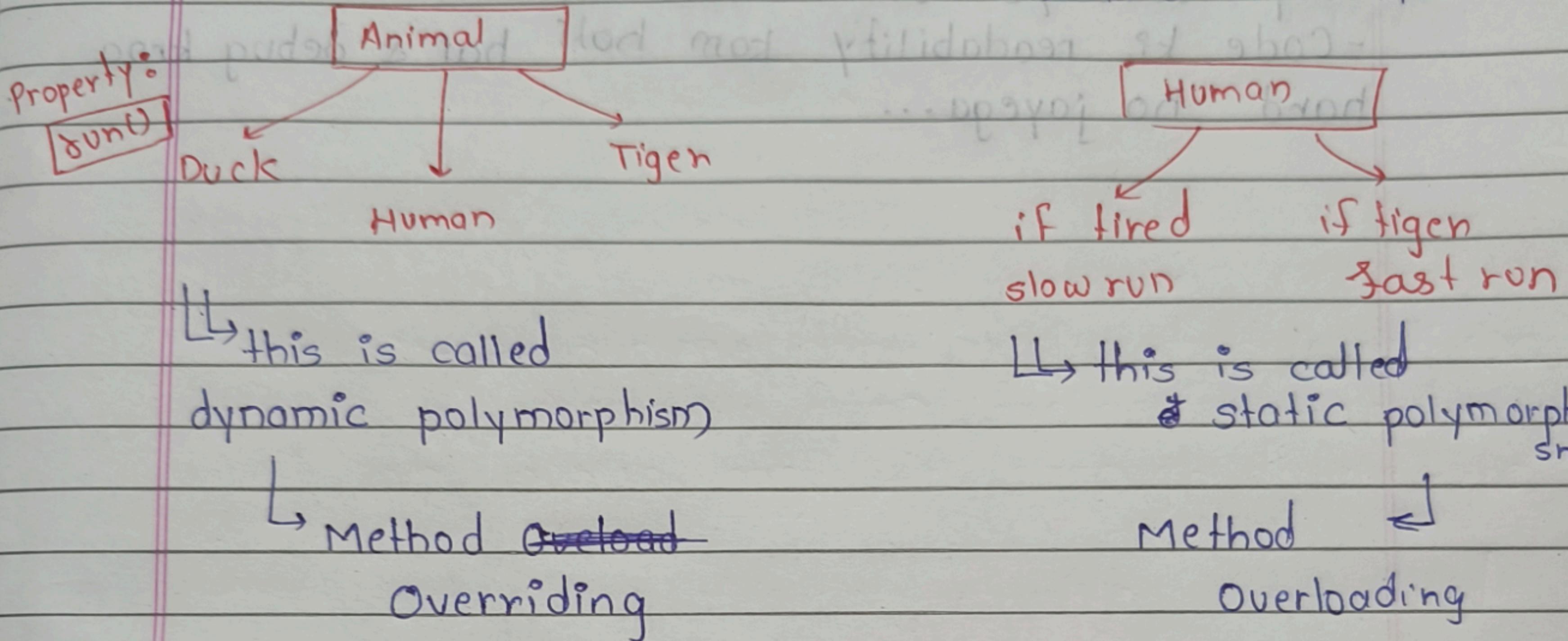
Polymorphism : many forms

Type - I

- Ek hi behaviour alag alag log alag tarah se behave karte hai...

Type - II

- Ek hi behaviour ko ek hi person depending upon parameters alag behave karta hai



Ex:

Ab humne pata hai ManualCar and ElectricCar alag alag tarah se accelerate hongi toh hum main car class mein usse declare kar skte hai and unke unke class mein woh open properties ke hisab se define kar skte hai

\hookrightarrow Dynamic Polymorphism : yaha overriding ho rha

Static Polymorphism : yaha overloading hogा

Ab hum individual car lete ManualCar ab humne pata hai agar gaadi start hai & speed constant hai & accelerate dheere se kiya to speed slowly badegi whi jor se kiya to jor se

\Rightarrow In short same func name different parameters or no. of parameter or datatype.

Homework

- 1) What is ~~object~~ Operator Overloading ?
- Operator like + / - / * ko hum opne hisab se
khud ke class me redefine kar skte hain
- 2) Why Java / C don't have it?
- Code ki readability kam hoti hai & debug krna
hard ho jayega...