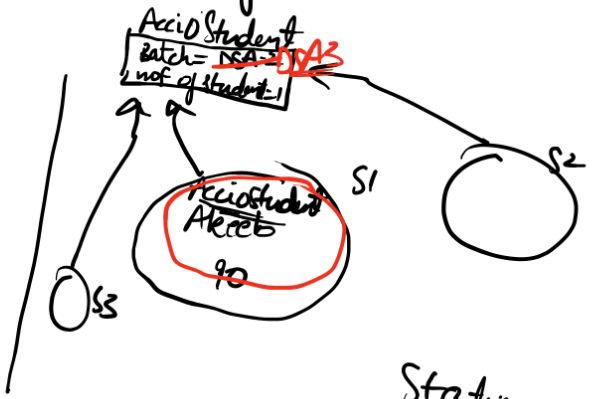
8:37PM

Static

↳ A keyword that defines something which belongs to the class → and not just to an instance.

JVM



static
↳ Blocks → When class are first loaded.
↳ Used to initialise static variables

Static variables
↳ Shared properties available to all the objects.
↳ All instances share these
↳ Created at class level
↳ can create global variables inside

a class.

Static methods

↳ use properties without any object

↳ used to access static variables

↳ they can also other static methods

↳ cannot call non static fields

↳ cannot use this in them.

Static classes

↳ Nesting of class

↳ inner class

outer class cannot be static

↳ static class cannot access non static members of

Advantages

↳ Memory efficiency
  ↳ static members are allocated the memory only once
↳ They can be access from anywhere without the need of object
↳ Writing efficient code

Access Specifiers

↳ limit the accessability
  ↳ used to define the scope of data
↳ private → accessed only within the class
  ↳ X outside the class
↳ protected → within package + outside the package through inheritence/child class
↳ public → which can be accessed from anywhere.

↳ public → anyone

↳ default → within a package

	within class	within package	outside pkg with in child class	outside package
private	✓	×	×	×
protected	✓	✓	✓	×
default	✓	✓	×	×
public	✓	✓	✓	✓

✓ Encapsulation → 1st pillar of OOPS

↳ Wrapping up of relevant data under a single unit

↳ members + functions

↳ class

Ensured with the use of

Classes and Objects + Access modifiers

Inheritance → 2nd Pillar of OOPS

↳ Mechanism through which one object acquires the properties and behaviour of parents.

↳ This is used so that we can reuse methods and fields of parent class + have some unique methods of current class

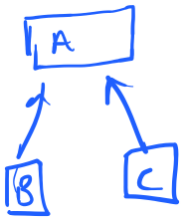
IS A

SDE — Employee

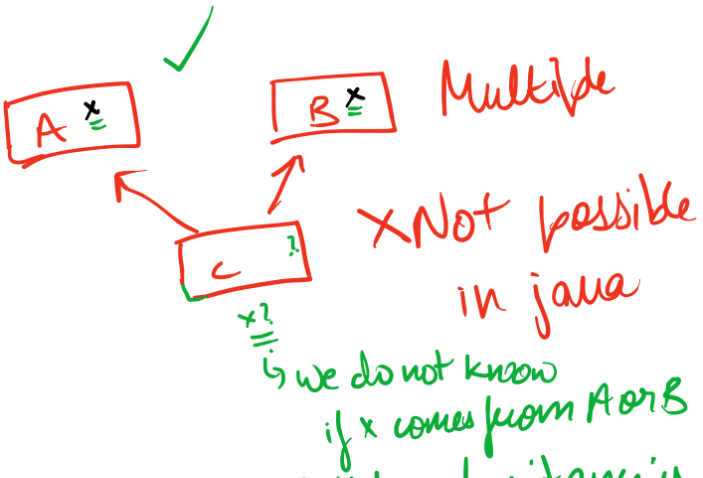
① Single

② Multilevel

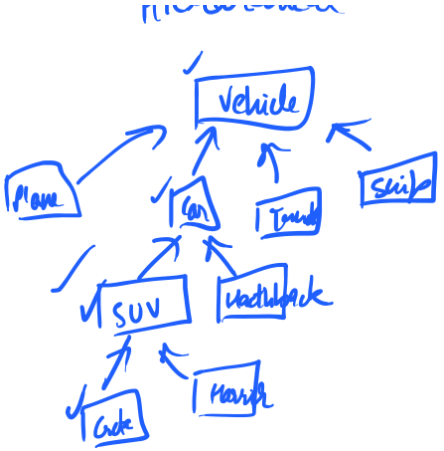
③

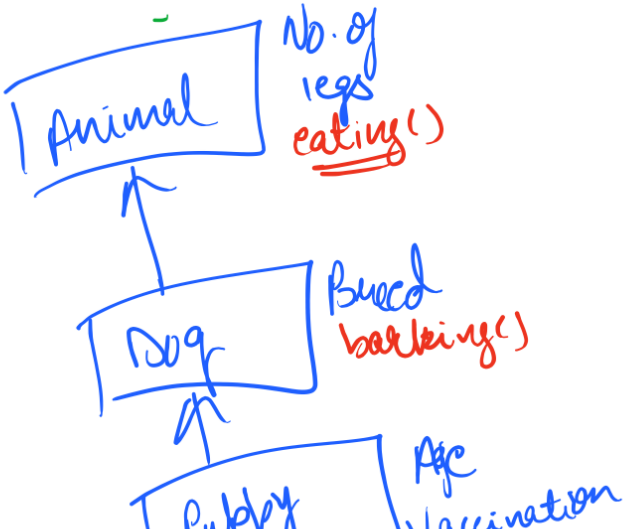


Hierarchical



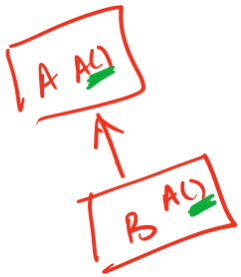
In java multiple inheritance is not allowed using classes





crying()

super → refer the immediate parent
↳ used to invoke parent method
↳ used to invoke parent constructor



B b = new B()

b.A();

function overriding