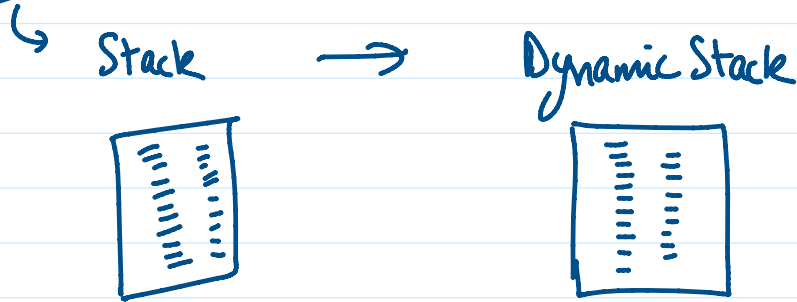


~~Capacity~~ → Dynamic Stack



push



Inheritance

```
class Parent {
    // Parent properties
}
```

Base

```
class Child extends Parent {
    // Parent properties
    // Child properties
}
```

}

Derived / Inherited / subclass

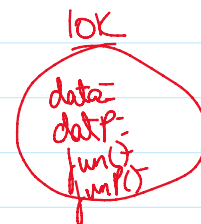
Compiler
→ LHS

→ Written / Code

case 1: P obj = new P();

JVM
RHS

Read / Input

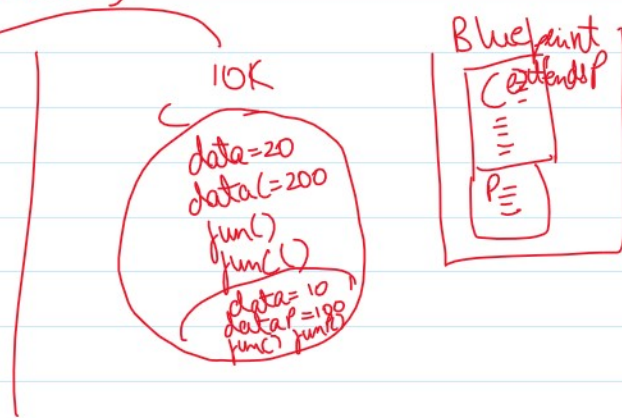


Case 2

10K
P obj = new C();

Blueprint 1

`P obj = new C();`



No properties of C are visible
but memory is alloted to C

⇒ type of address

* In case of collision for data members
↳ resolved by LHS

* In case of collision for data functions
↳ resolved by RHS due to overriding

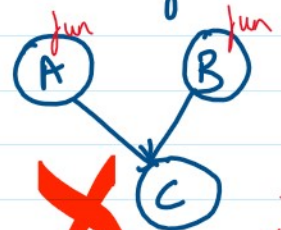
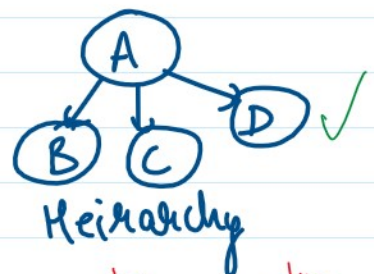
Types of Inheritance



Single



Multilevel



At a time, a class can extend only single class

interfaces

Design Patterns

Vehicle
↓

car {
type
speed
}

is-A
↓
inheritance

has-A ??

↓
data members

Human
↓
Student

Object (Sabka Baap)

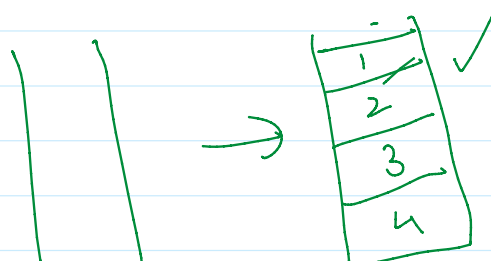
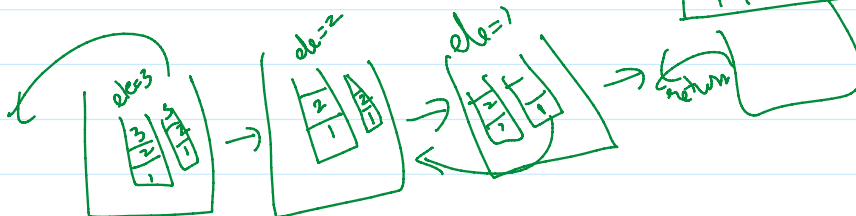
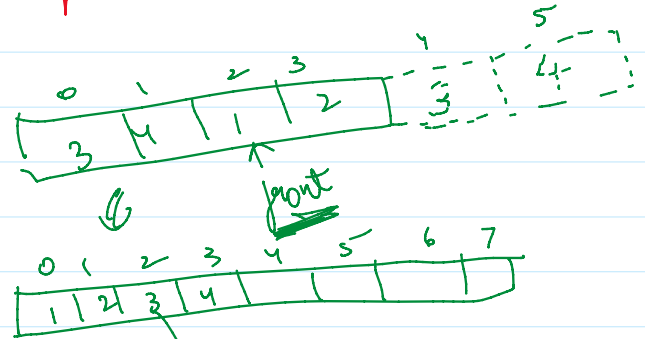
↳ provides some properties which are automatically inherited

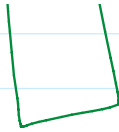
[1, 2, 3, 4]
↓ ← ↑

1) hasNext() ⇒ true/false

2) next() ⇒ Abhi ki value return
↳ moves ptr to next value

[2, 6]





* Next Greater on Right

[50, 30, 20, 40, 10, 15, 5, 60, 15, 8] ✓



[60, 40, 40, 45, 45, 60, 60, -1, -1, -1]

$\left(\frac{60}{0}, \frac{40}{1}, \frac{40}{2}, \frac{45}{3}, \frac{45}{4}, \frac{60}{5}, \frac{60}{6}, \frac{-1}{7}, \frac{-1}{8}, \frac{-1}{9} \right)$ ✓



↓
stack: jinka
right nhi
mila