

## Encapsulation

↳ wrapping up the data and methods in a single class

Security

[private int age;]

⇒ Access Modifiers → ④

→ private: only inside the same class.

→ default: within the same package → collection of classes.

→ protected: default + child class (can be outside the package).

→ public: anywhere

→ private → getters and setters  
↓  
returns the val  
used to set some value

→ class Bank Account {  
public int balance;  
private

public void set Balance (int balance) {  
if (balance < 100000)  
balance = 100000;  
}

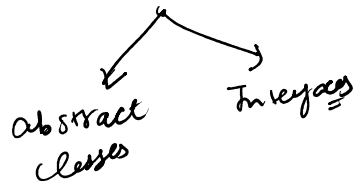
Bank Account kind = new BankAccount();  
kind.balance = 100000;

## Abstraction

↳ hiding the details and showing only the functionality

[System.out.println("Hello");]

↓  
Abstraction



## # Abstract class

- abstract and non-abstract methods;
- you cannot instantiate an abstract class.

## # Interface

↳ 100% abstract class

→ Cannot instantiate

→ final and static

value will not change.  
It has to be initialized when declaring.



## # Inheritance

↳ getting the properties from the parent.

Parent → Child

- Class extends class
- Class implements Interface
- Interface extends Interface

## # Child object

{ Child() ?  
calling Parent() }

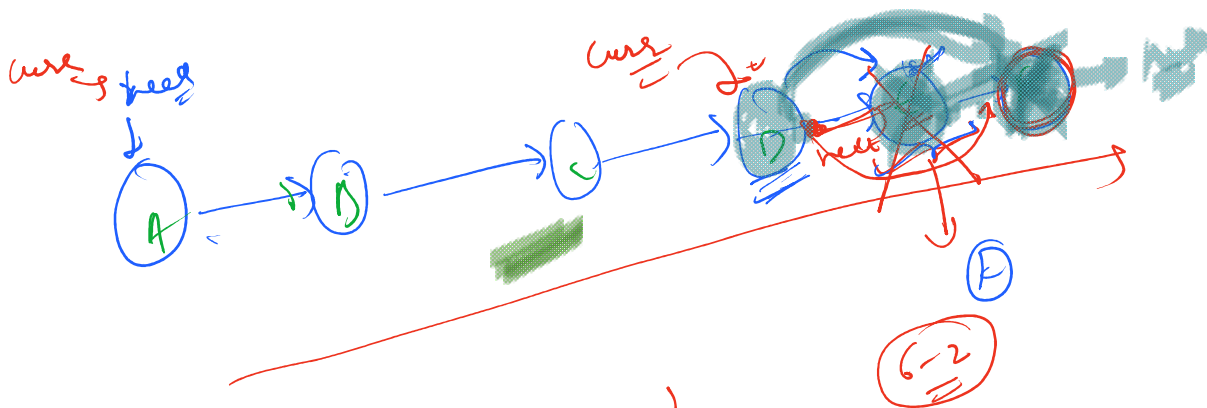
Child() calling Parent()

→ super() → parent constructor

→ super.func()

→ this.func() → methods of current object.

→ this() → my own constructor



for (n-k) work as next

→ curr.next = curr.next

