

Polymorphism

↳ Poly + Morph
↓
Many
↓
Forms

function
overloading

↳ compile time
polymorphism

increases the readability of the
code

area ()

area (int r) { → circle
return 3.14 × r × r;

}

area (int l, int b) { → rectangle
return l × b;
}

→ By changing the number of args

→ By changing the datatype

→ Overloading does not work on changing the return type

Method overriding → runtime polymorphism

↳ A child class that is having a same function as the parent class

↳ used to have specific implementation of a method that is already provided by the parent.

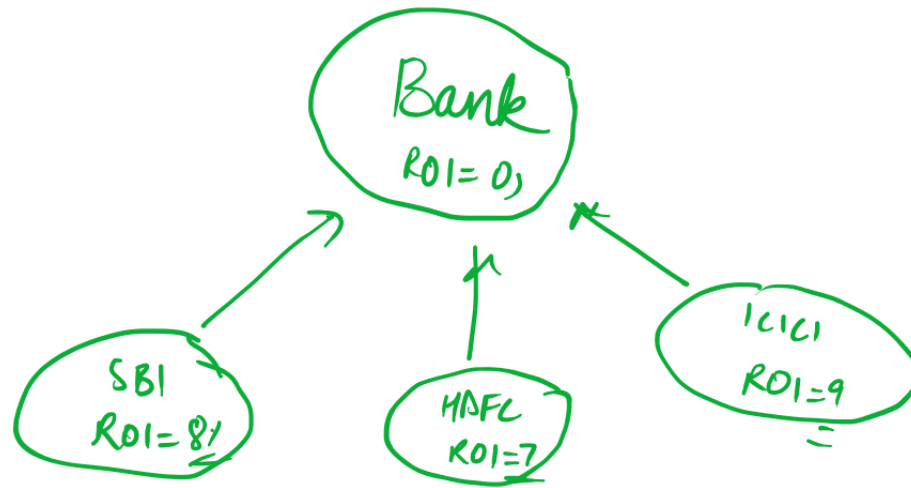
→ The parameters should be same.

↳ Objects

↳ Instance of the object is decided at runtime.

↓
We cannot override static

→ The function name should be same.



Overwrite same
methods

↳ They do
not need
any object

Final Keyword

↳ used to restrict the user.

→ variable

↳ whose value cannot
change

→ class

↳ which cannot
be extended

→ method
↳ which cannot be
overridden

Dynamic Method Dispatch

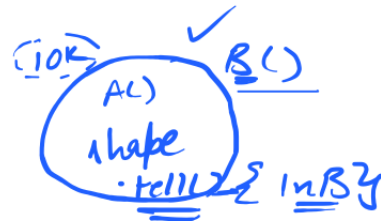
↳ objects are created at
runtime. → which method will be
invoked is also at runtime.

A a = new B();

10K

A a = 10K

a.shape x
x



100 - 10i
0.