

Full stack web development using python

Polymorphism



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Agenda

① Polymorphism

② Example

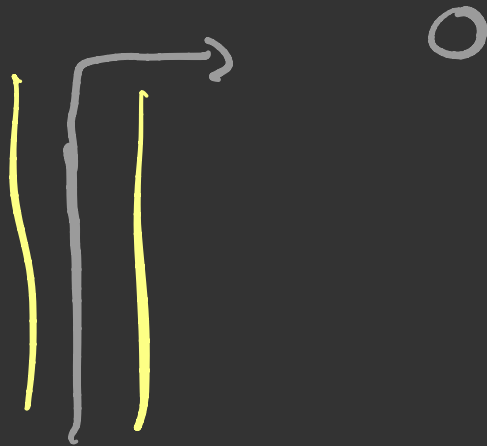
Polymorphism

poly → Many

morph → forms / meanings

दाए
Take right turn

सही
Am I right?



अधिकार
Fight for your rights

When you have commonly named method across classes or sub-classes.

This is polymorphic as same interface with different implementations

When one thing has many interpretations and all resolved on runtime according to the context then it is polymorphism.

Class A:

```
def f1():  
    print("A")
```

Class B:

```
def f1():  
    print("B")
```

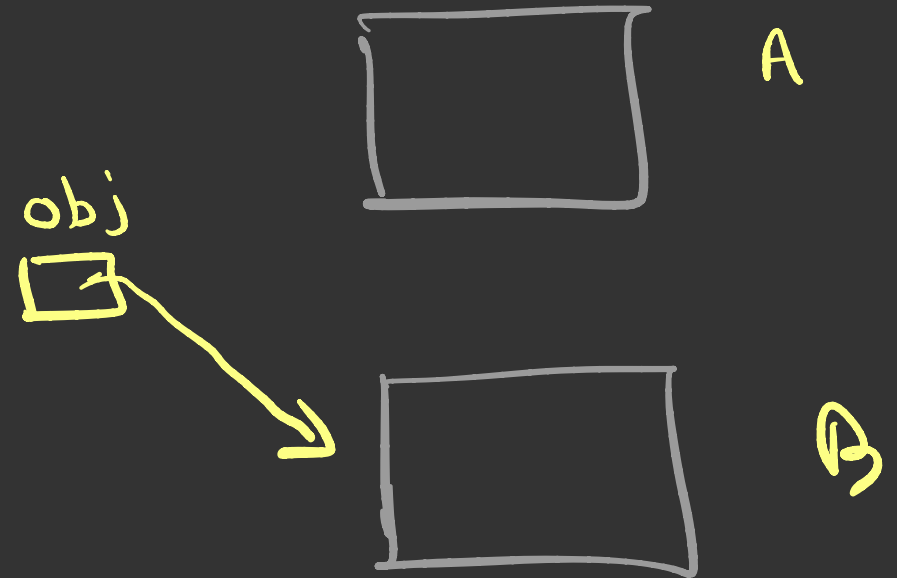
obj = A()

→ obj.f1() #A

obj = B()

→ obj.f1() #B

Example



Example

```
class Animal:
```

```
    def __init__(self, name):  
        self.name = name
```

```
    def talk(self):
```

```
        raise NotImplementedError("Error")
```

```
class Cat(Animal):
```

```
    def talk(self):  
        return "meow"
```

```
class Dog(Animal):
```

```
    def talk(self):  
        return "woof"
```

```
animals = [cat("Rekha"), cat("Soniya"), Dog("Moti"), cat("Rupa"),  
                                                    Dog("Gabbar")]
```

```
for animal in animals:
```

```
    print(animal.name, "-", animal.talk())
```