

Programming

Lesson 22 - Inheritance

الدرس 22 - الوراثة

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Why ?

Dog

```
class Dog:
    def __init__(self, name, age, color):
        self.name = name
        self.age = age
        self.color = color

    def get_name(self):
        return self.name

    def make_sound(self):
        print('This Dog:', self.name, 'is barking')
```



```
    def make_sound(self):
        print('This Cat:', self.name, 'is meowing')
```

Horse

```
class Horse:
    def __init__(self, name, age, color):
        self.name = name
        self.age = age
        self.color = color

    def get_name(self):
        return self.name

    def make_sound(self):
        print('This Horse:', self.name, 'is neighing')
```



Inheritance

Animal

```
class Animal:
    def __init__(self, name, age, color):
        self.name = name
        self.age = age
        self.color = color

    def get_name(self):
        return self.name

    def make_sound(self):
        print('This Animal:', self.name, 'w no sound')
```

Dog

```
class Dog(Animal):
    def make_sound(self):
        print('This Dog:', self.name, 'is barking')
```

Cat

```
class Cat(Animal):
    def make_sound(self):
        print('This Cat:', self.name, 'is meowing')
```

Horse

```
class Horse(Animal):
    def make_sound(self):
        print('This Horse:', self.name, 'is neighing')
```

super

Cat

```
class Cat(Animal):  
    def make_sound(self, num):  
        super().make_sound()  
        print('This cat:', self.name, 'is meowing' * num)
```

- ▶ Super() will call parent class

super

- ▶ Animal instantiated with:
`def __init__(self, name, age, color):`
- ▶ Cat:
`def __init__(self, name, age, color, eyes_color):`

Animal

```
class Animal:  
    def __init__(self, name, age, color):  
        self.name = name  
        self.age = age  
        self.color = color  
  
    def get_name(self):  
        return self.name  
  
    def make_sound(self):  
        print(' This Animal:', self.name, 'w no  
        sound')
```

Cat

```
class Cat:  
    def __init__(self, name, age, color, eyes_color):  
        super().__init__(name, age, color)  
        self.eyes_color = eyes_color
```

Let's go...

- ▶ Open PyCharm:
 - ▶ Start coding 😊

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Thank you 😊!

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Stay tuned for more!