

Lecture

Intro to Special Methods





Special Methods

- ◆ Add “magic” to your class.
- ◆ You can customized them,
but you do not call them directly.
- ◆ They run as the result of an **action**.



Special Methods

5 + 6



Special Methods

5 + 6



`__add__()`



Special Methods

5 + 6



(5).__add__(6)



Special Methods

```
>>> 5 + 6
```

```
11
```

```
>>> (5).__add__(6)
```

```
11
```



Special Methods

```
>>> 5 + 6
```

```
11 ←
```

```
>>> (5) . __add__ (6)
```

```
11 ←
```



Strange syntax?

```
__add__()
```




Special Methods

```
__add__()
```

```
__str__()
```


```
__repr__()
```

```
__len__()
```



Special Methods

Double
leading
and
trailing
underscores

 add  ()

str ()

repr ()

len ()



Special Methods

Double
leading
and
trailing
underscores

`__add__()`

↓ `__str__` ↓ `()`

`__repr__()`

`__len__()`



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`↓ __repr__ ↓()`

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Special Methods

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`__add__()`

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Special Methods

```
class Dog:

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

    def __str__(self):
        return f"I'm a Dog. My name is {self.name}"
```





Special Methods

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Documentation

