Lecture

@property

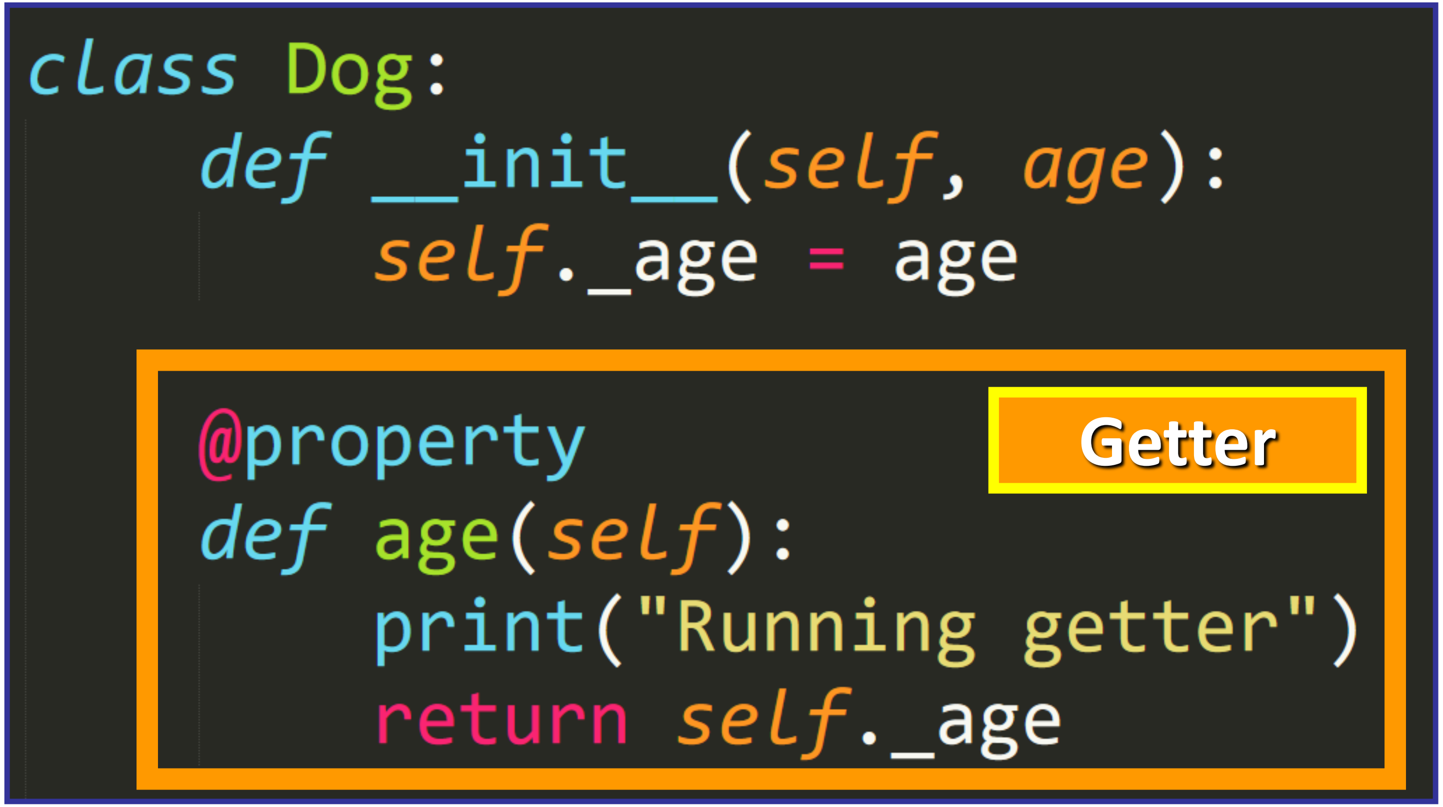
The @property decorator

- More compact
- More readable
- Avoid calling property() directly
- Avoid namespace pollution:
    - No get_<attr>
    - No set_<attr>
    - Reuse the name of the property

The @property decorator

```python
class Dog:
    def __init__(self, age):
        self._age = age
```

The @property decorator



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    def age(self):
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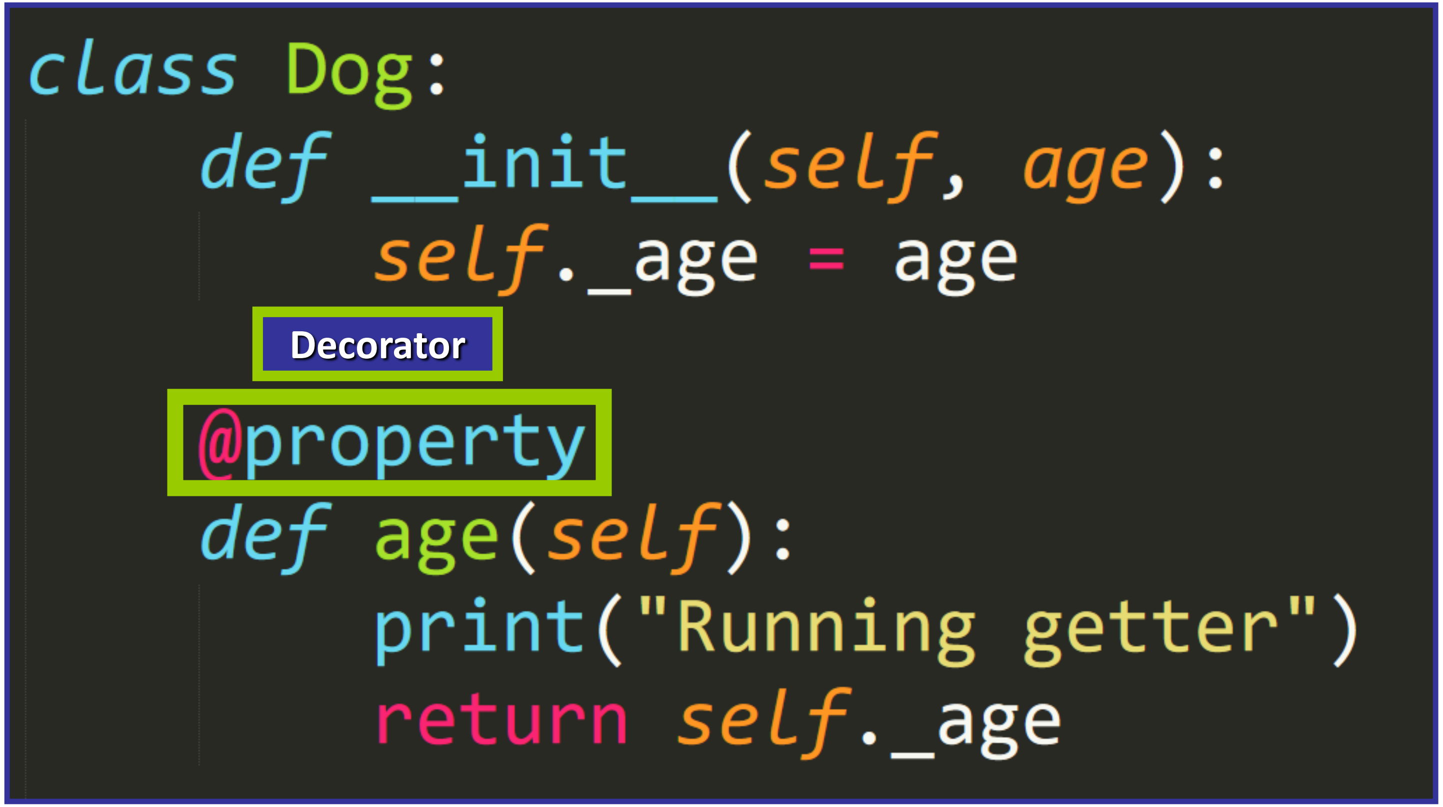
The @property decorator



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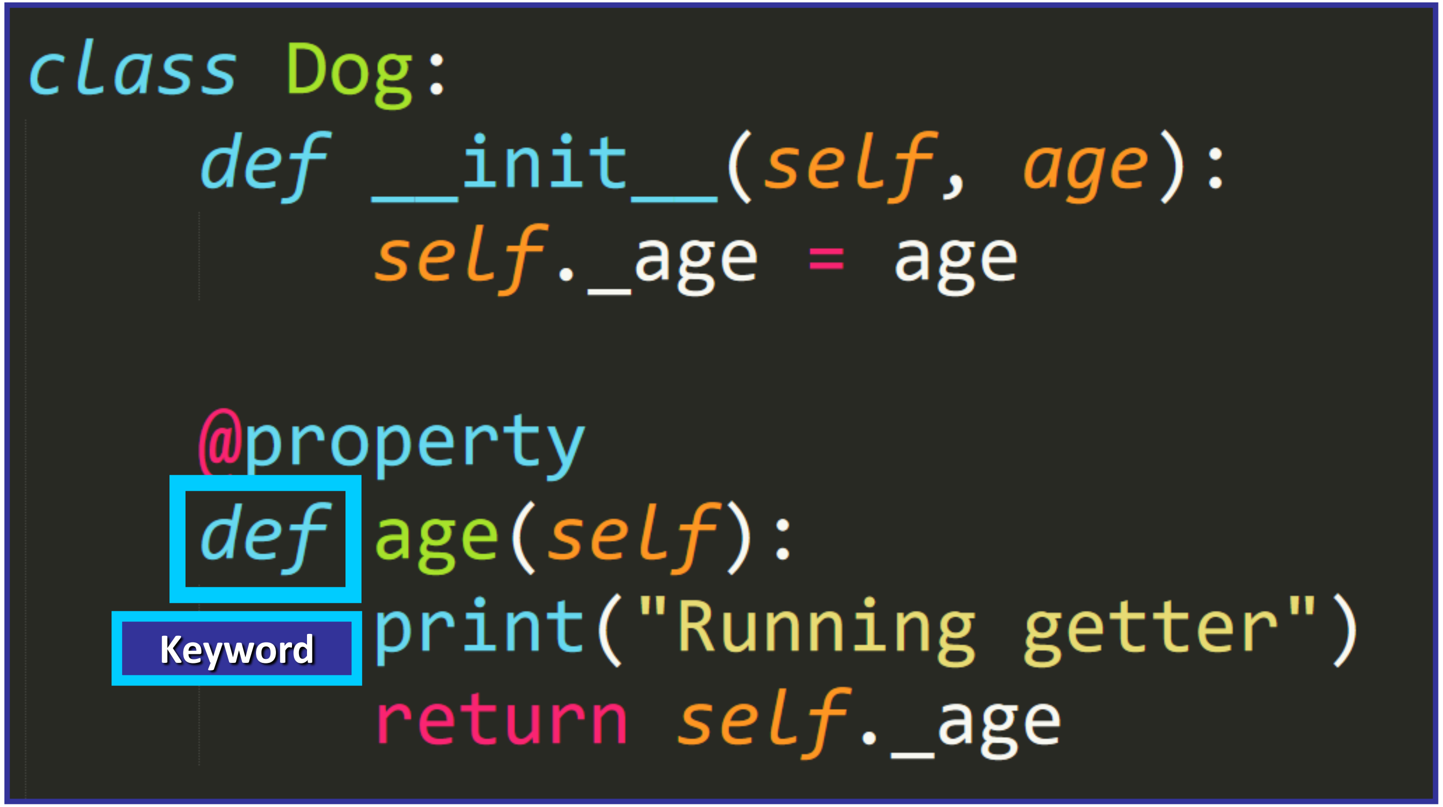

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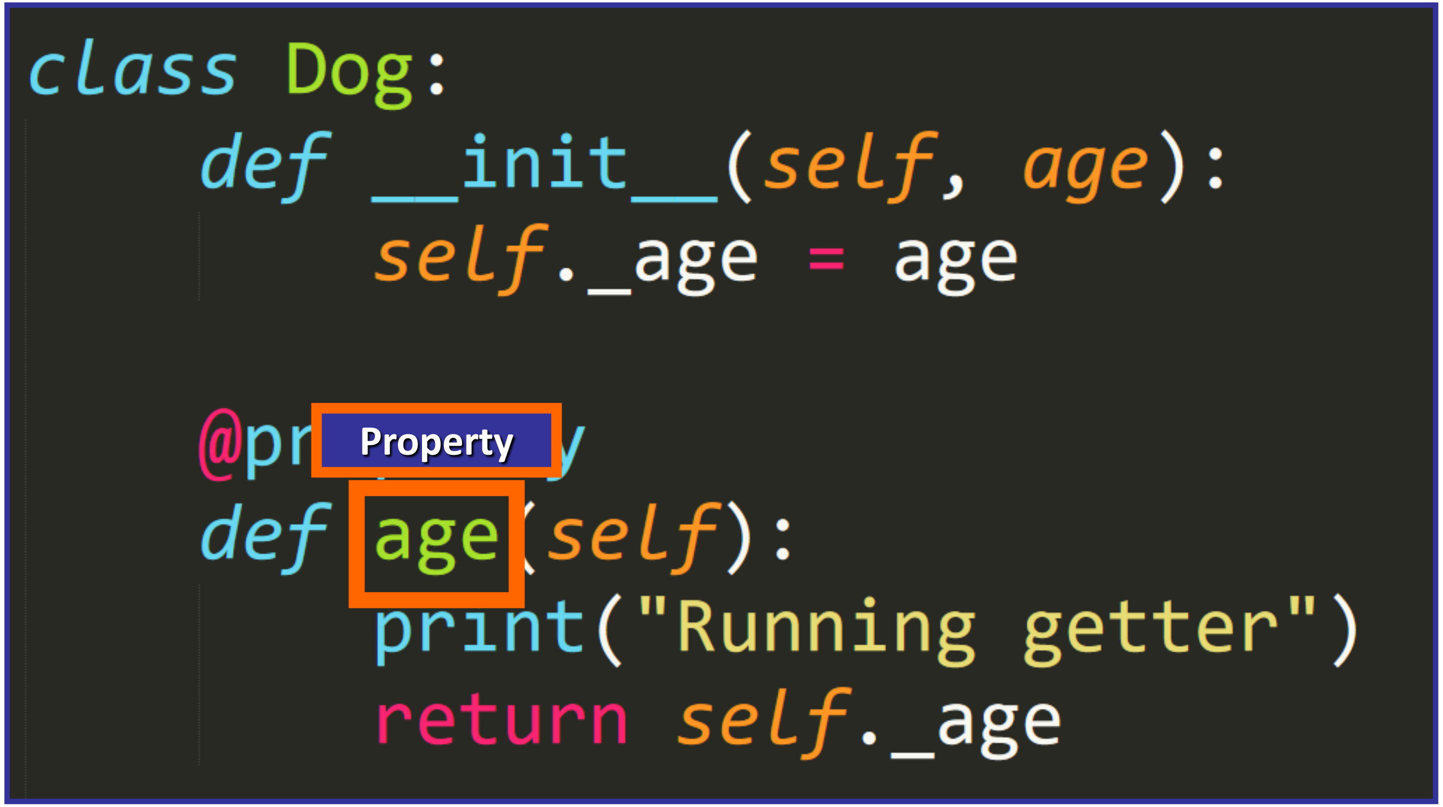

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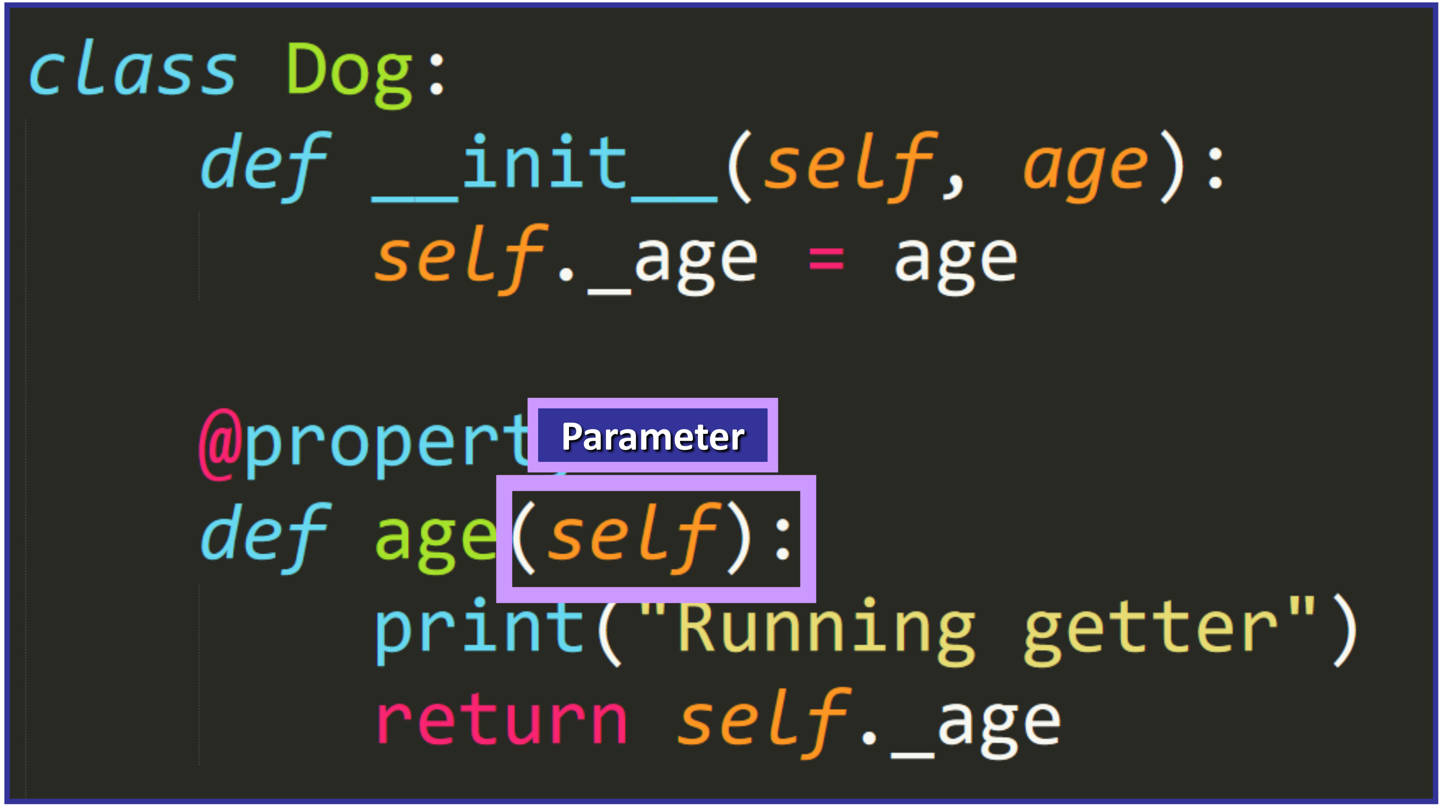

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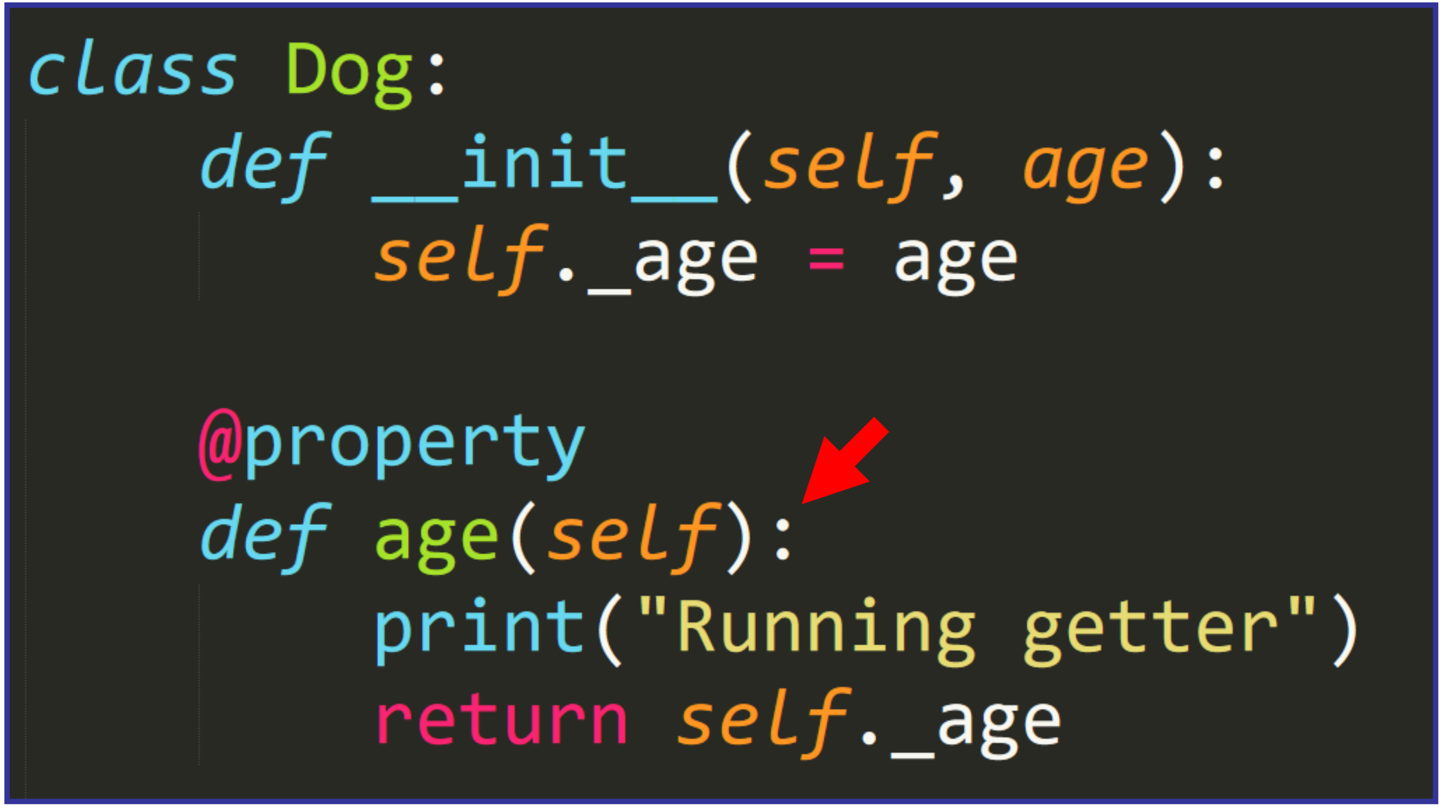

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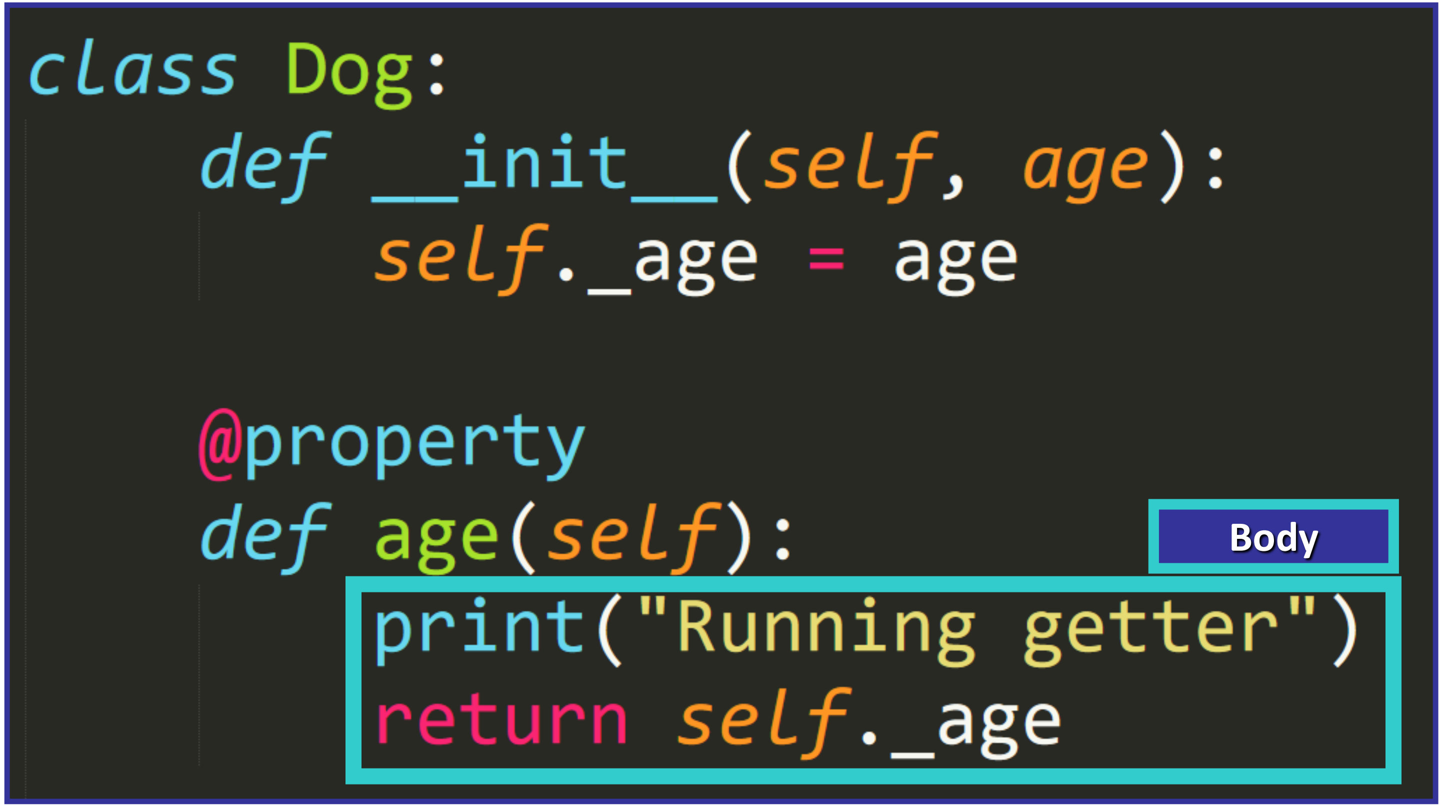

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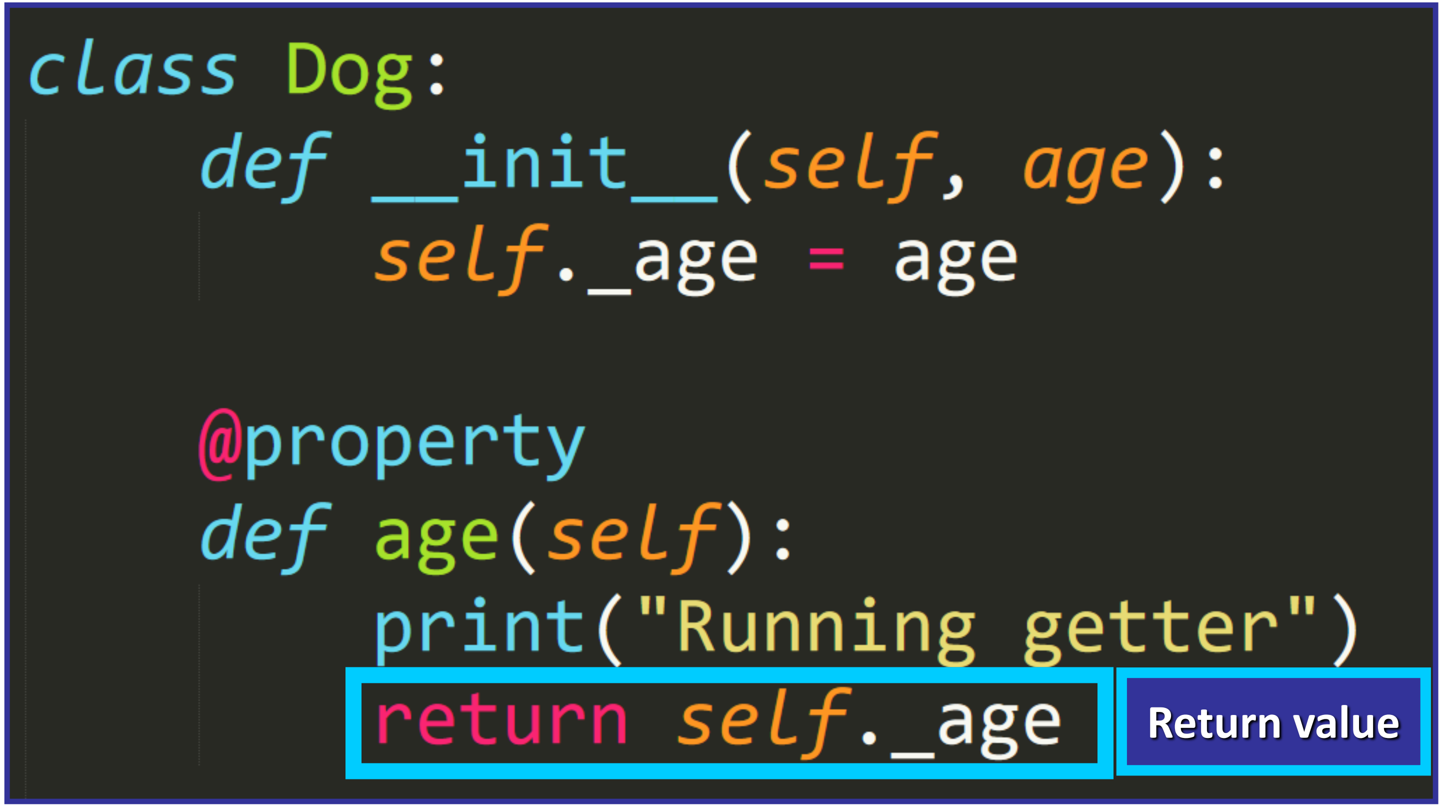

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The @property decorator

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>>> class Dog:
    def __init__(self, age):
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    @property
    def age(self):
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>>> dog1 = Dog(15)
>>> dog1.age
Running getter
15
```

The @property decorator

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The @property decorator

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>>> class Dog:
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Mention that you copy/paste to idle, indentation

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    def age(self):
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>>> dog1 = Dog(15)
>>> dog1.age
Running getter
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```
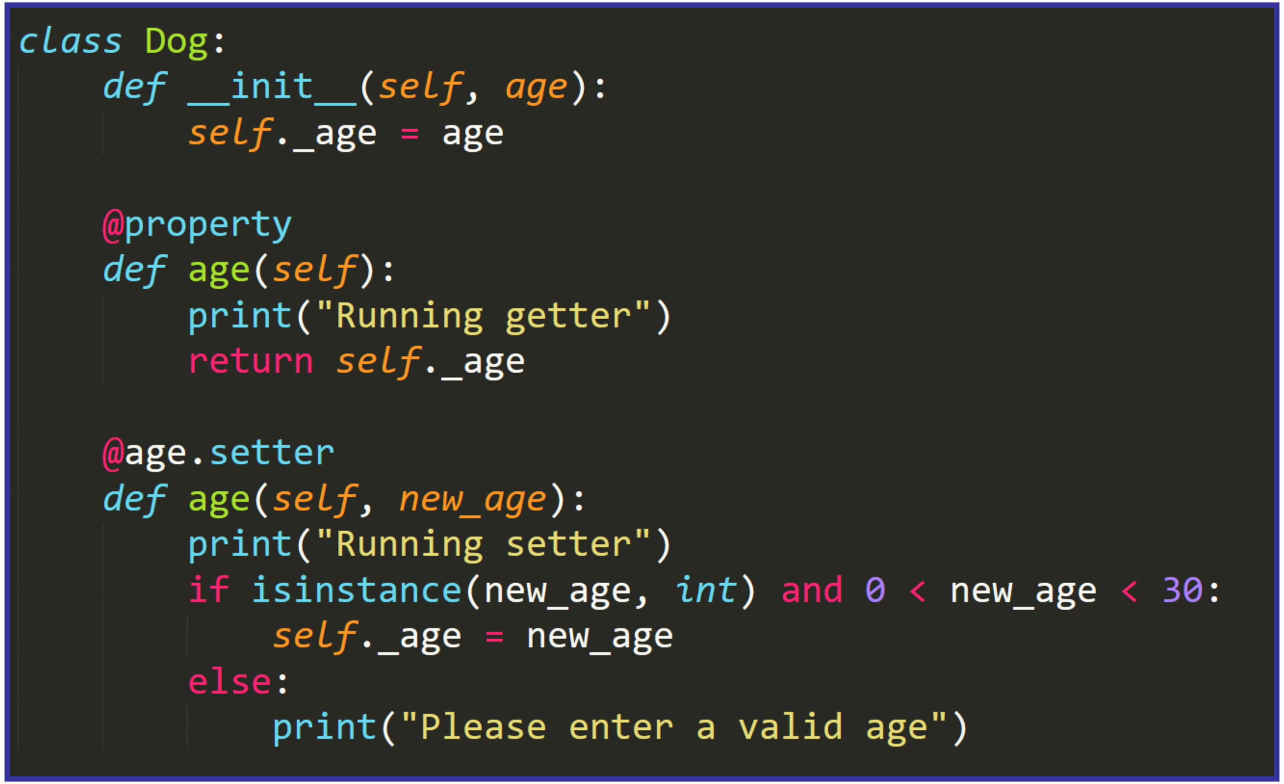

The @property decorator

Getter ✓

Setter ?

The @property decorator



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class Dog:
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    @age.setter
    def age(self, new_age):
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        if isinstance(new_age, int) and 0 < new_age < 30:
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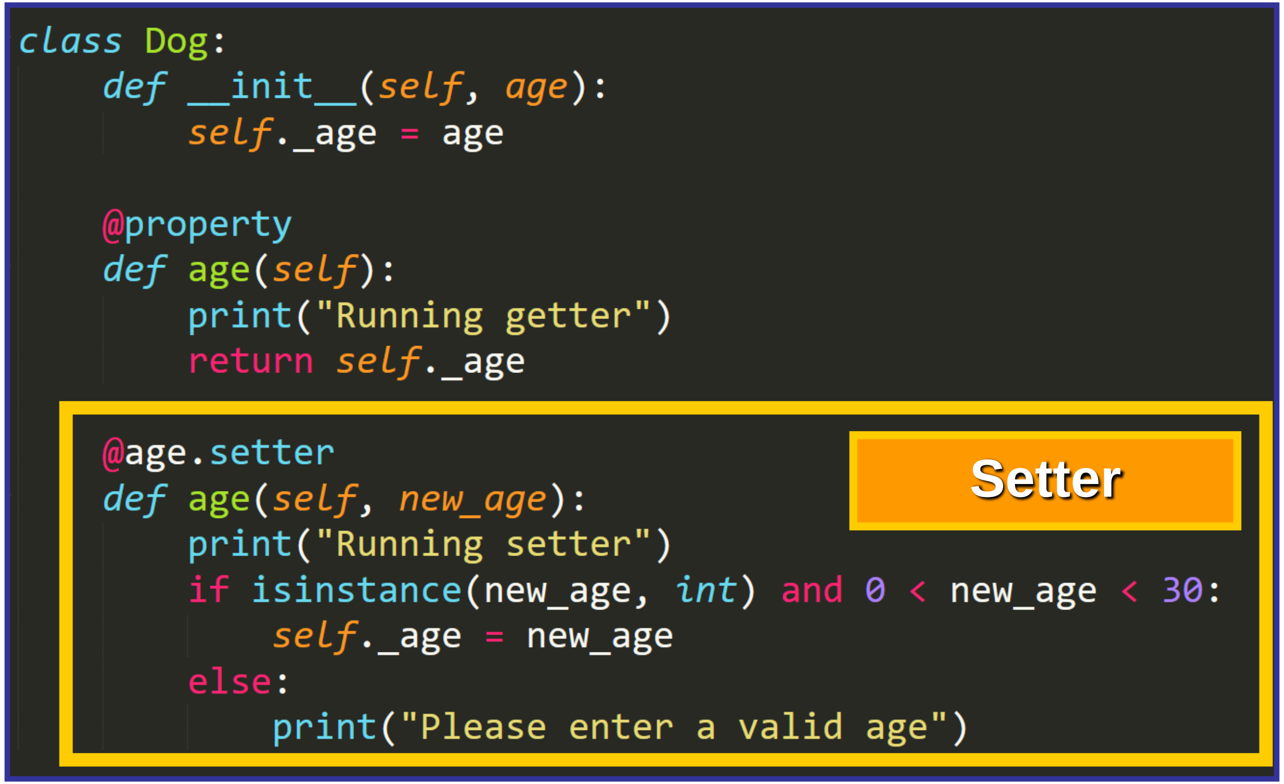
```

The @property decorator



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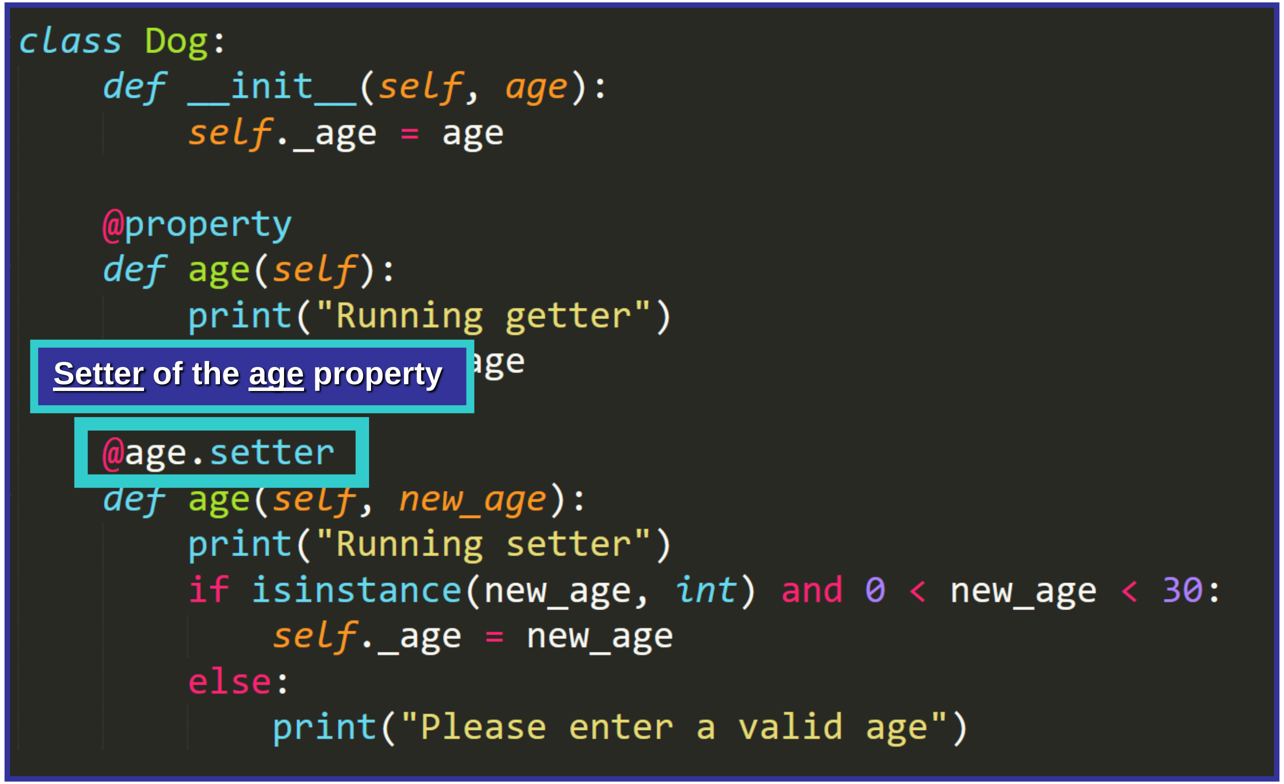

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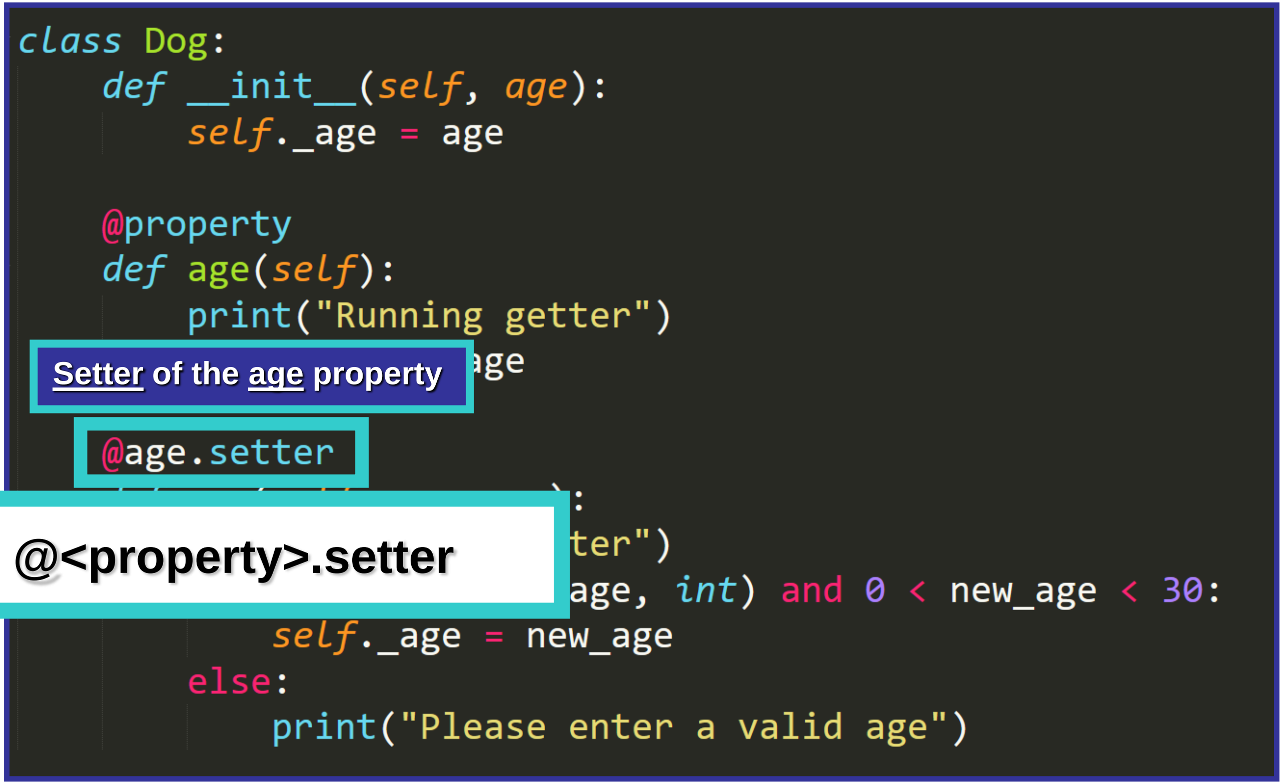
Setter of the age property

The @property decorator



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```
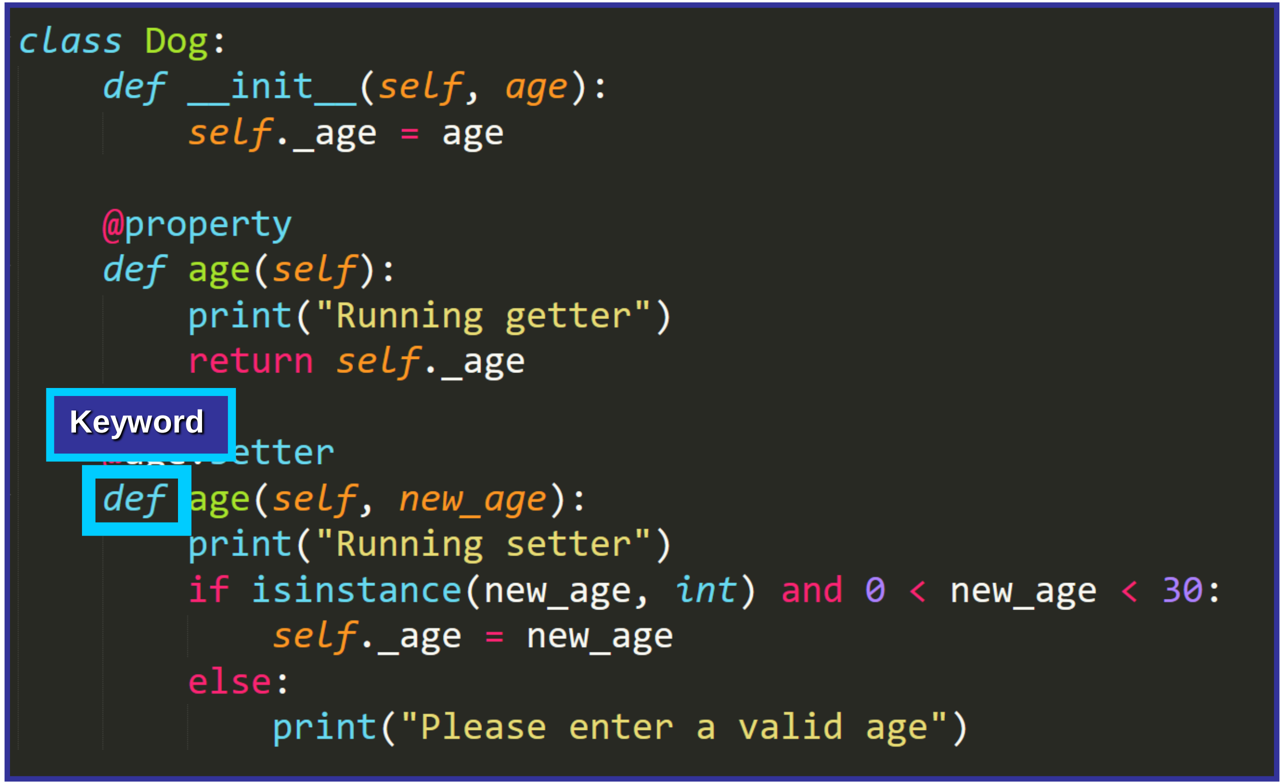

Setter of the age property

@<property>.setter

The @property decorator



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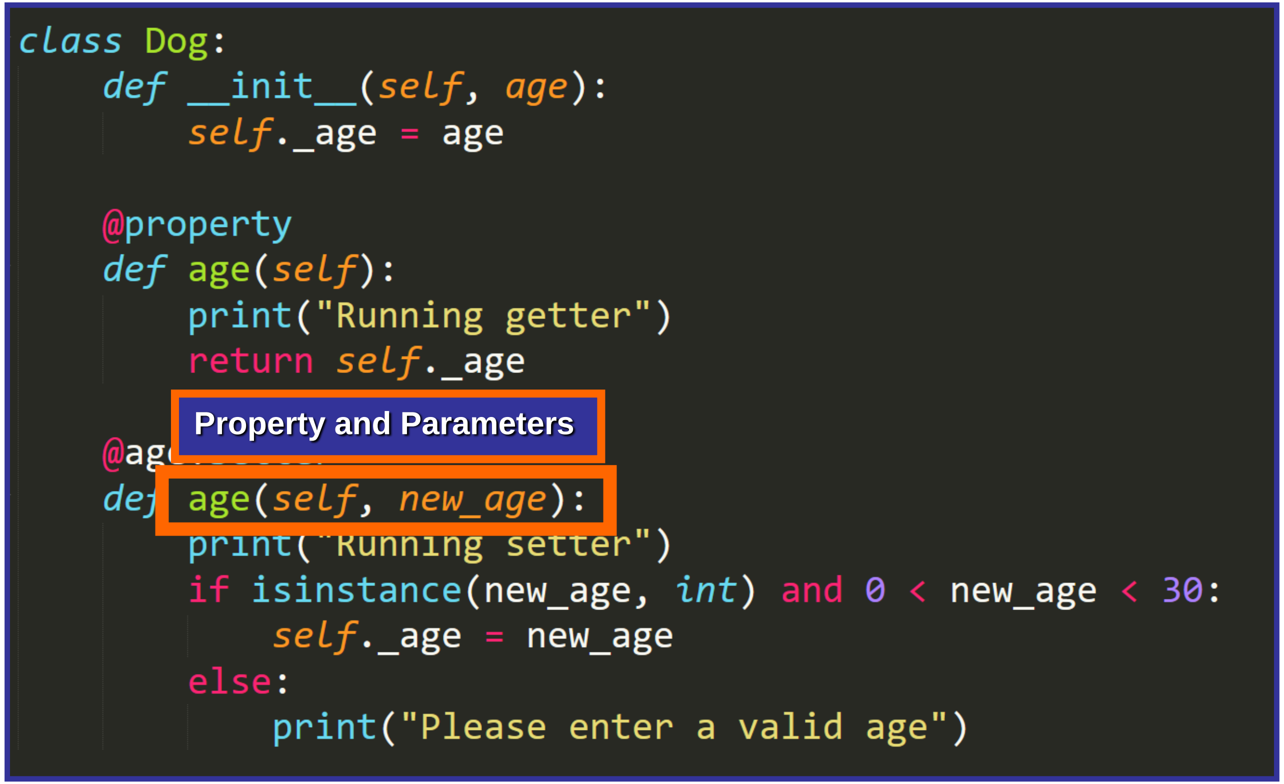
The @property decorator



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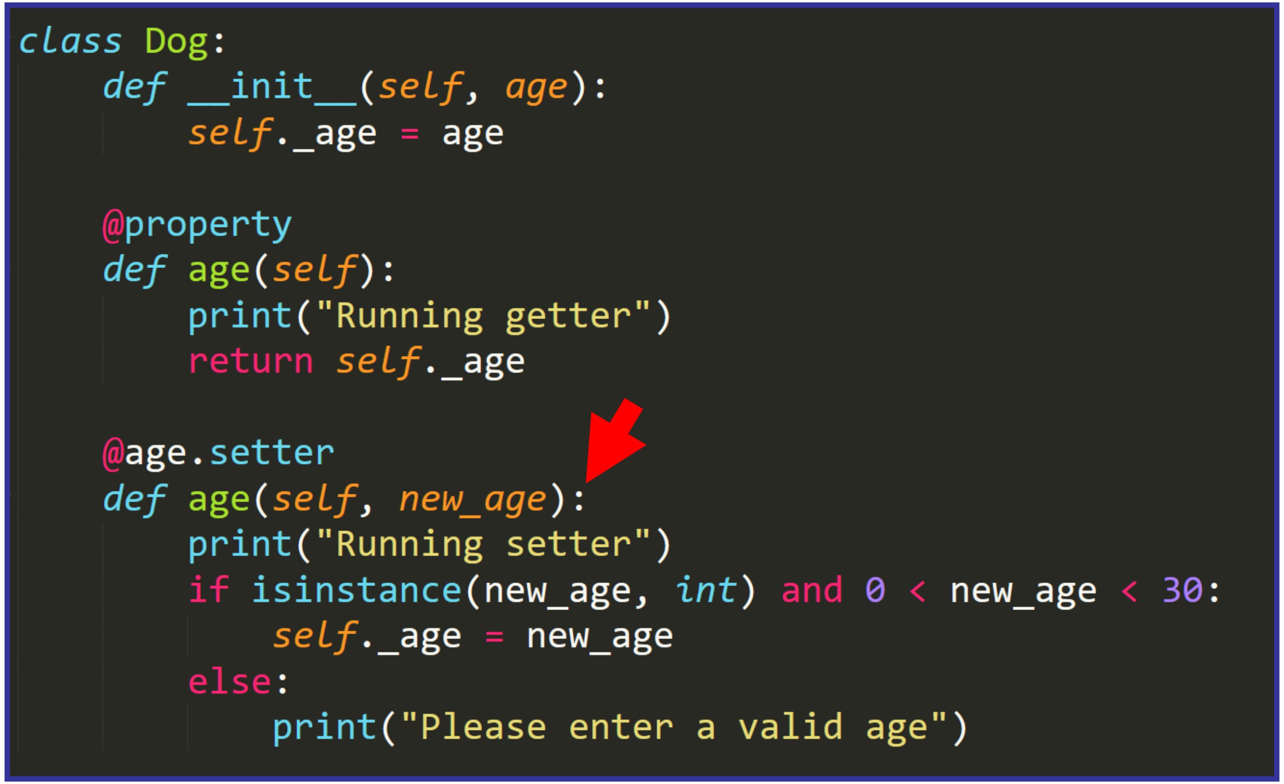
Property and Parameters

The @property decorator



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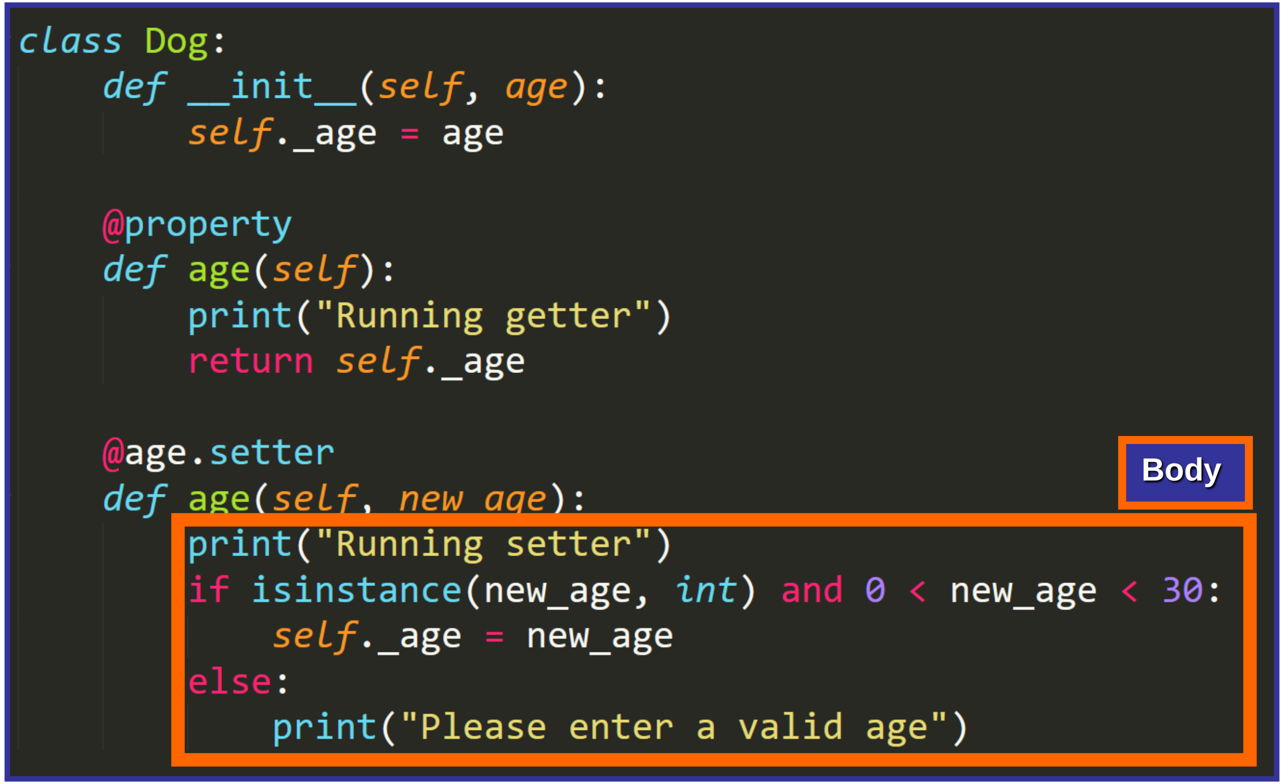

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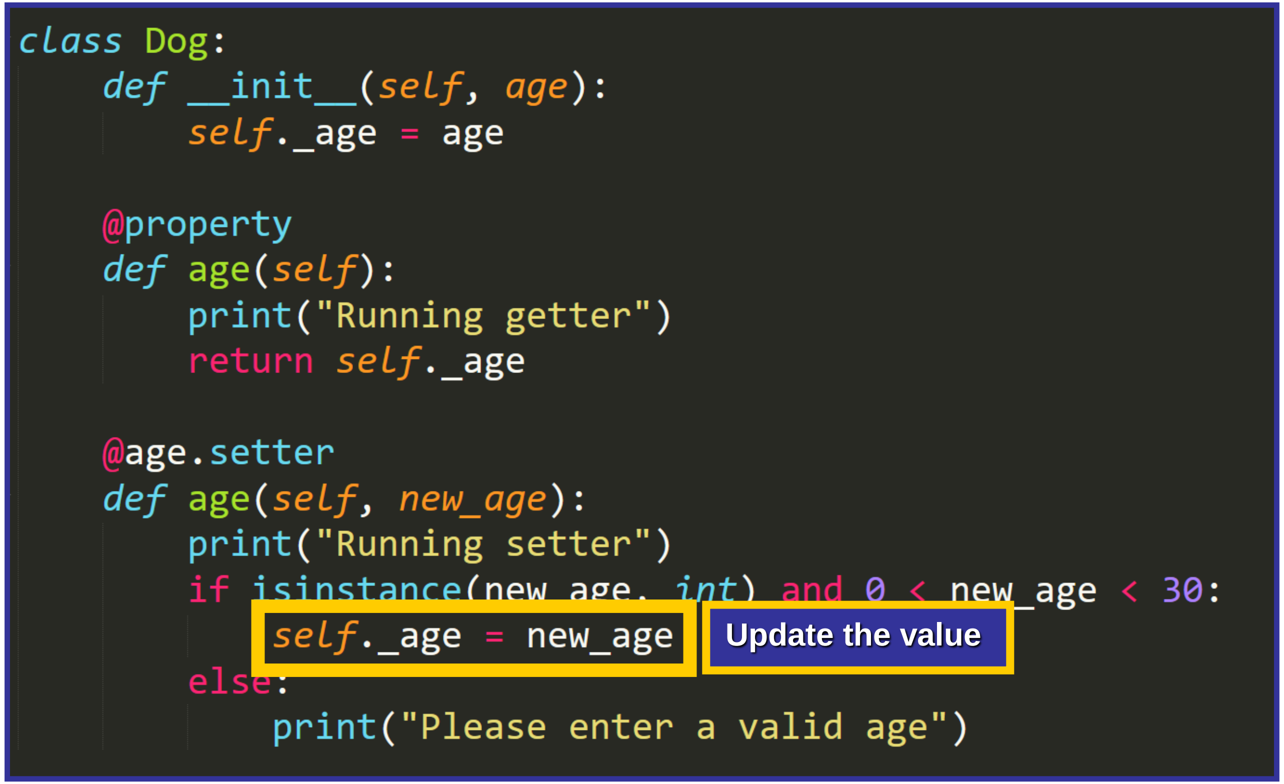

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>>> dog1 = Dog(15)
>>> dog1.age = 16
Running setter
>>> dog1.age
Running getter
16
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The @property decorator

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        print("Running getter")
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    def set_age(self, age):
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    age = property(get_age, set_age)
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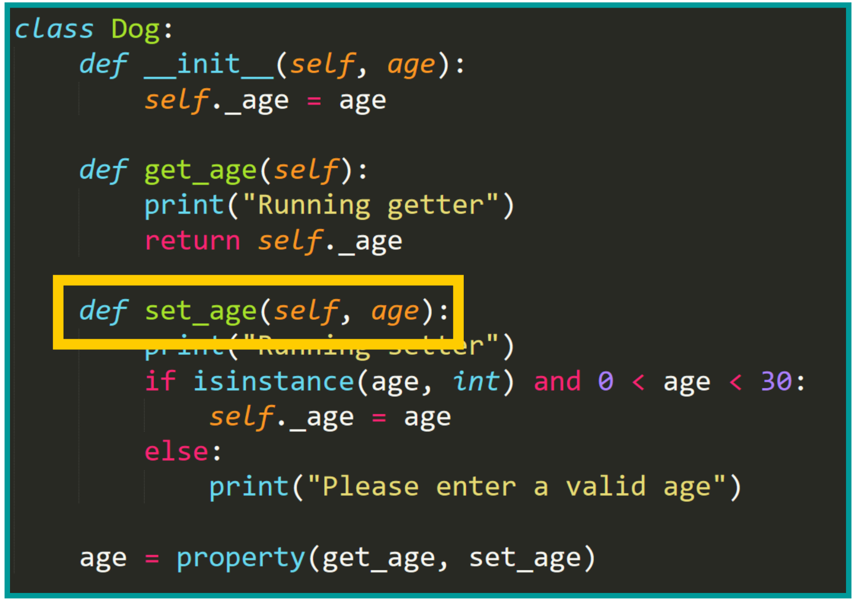

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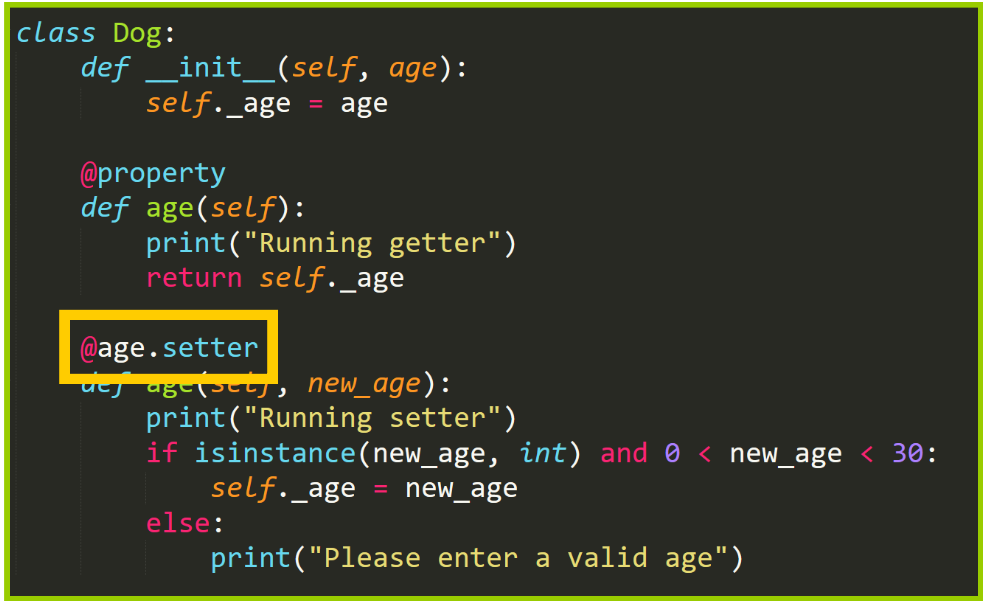

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Now... Example