decorators

modify or enhance functions without changing their definition

Implemented as callables that take and return other callables

decorators

modify or enhance functions without changing their definition

```
@my_decorator
def my_function():
```

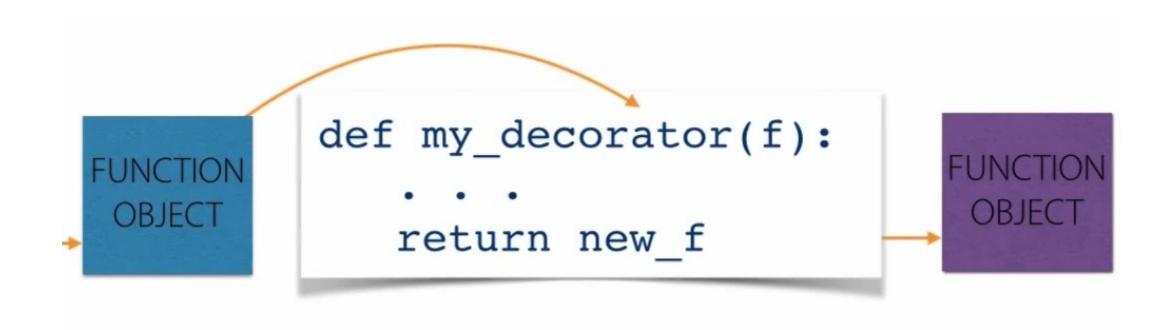
```
@my_decorator
def my_function(x, y):
    return x + y
```

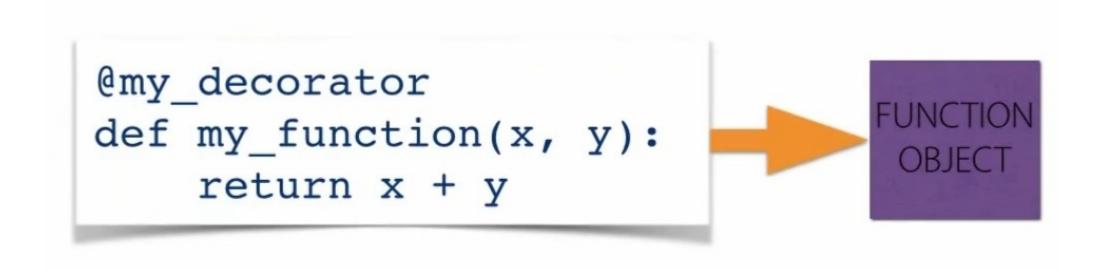
```
@my_decorator
def my_function(x, y):
    return x + y
FUNCTION
OBJECT
```

```
def my_decorator(f):

OBJECT

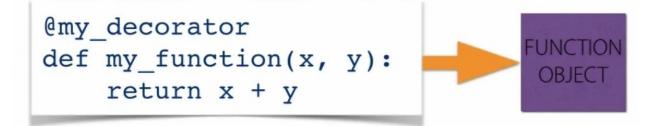
return new_f
```

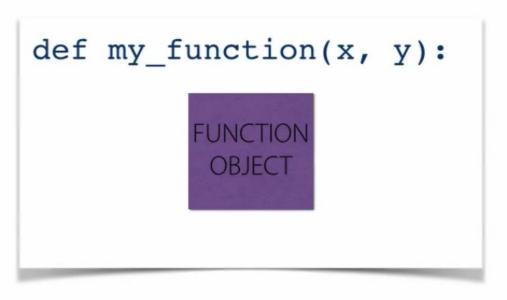




def my_function(x, y):
 FUNCTION
 OBJECT

```
@my_decorator
                               @my decorator
                                                                FUNCTION
                               def my_function(x, y):
def my_function(x, y):
                                                                OBJECT
                                    return x + y
    return x + y
                                                    def my_decorator(f):
           def my_decorator(f):
                                           FUNCTION
 FUNCTION
                                            OBJECT
                                                       return new_f
  OBJECT
              return new_f
```





FUNCTION

OBJECT

- Replace, enhance, or modify existing functions
- Does not change the original function definition
- Calling code does not need to change
- Decorator mechanism uses the modified function's original name