```python
def print_my_name(func):
    def new_func(*args, **kwargs):
        print(func.__name__)
        return func(*args, **kwargs)
    return new_func


@print_my_name
def foo(x):
    return x


>>> foo(1)
foo
1
>>>
```
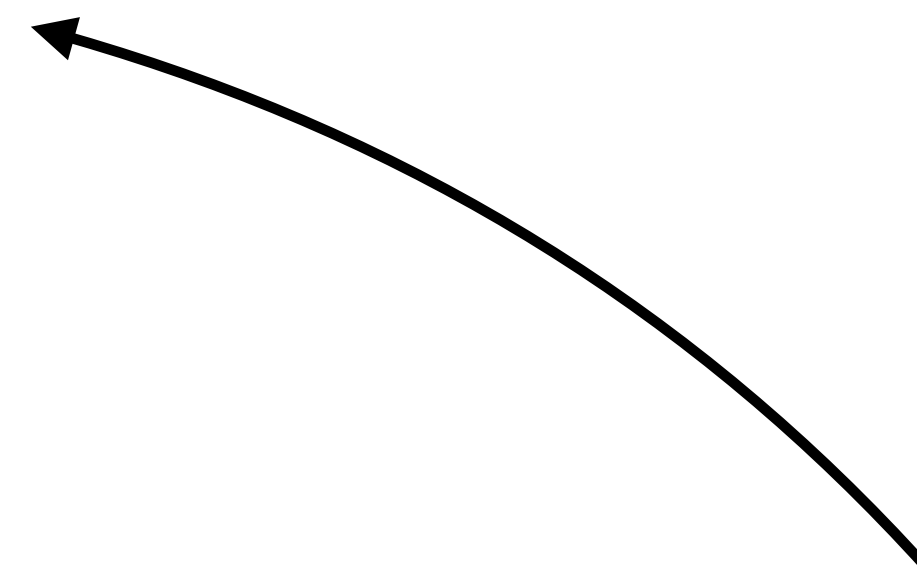
equals to:
foo = print_my_name(foo)

4.Depression

(kill me now)

```
>>> c = counter()
>>> for result in c:
...       # do stuff with result
...
...
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
TypeError: 'function' object is not iterable
```