Functional Programming

f(x) = a

x → args
a → return value

f(x) = a

a == b

f(x) = b

if same function, same args then.

---

def square(x):
    return x**2

① name
② args
③ return value

→ single line body. must too return.

square = lambda x : x**2

① square
② x
③ x**2

keyword.

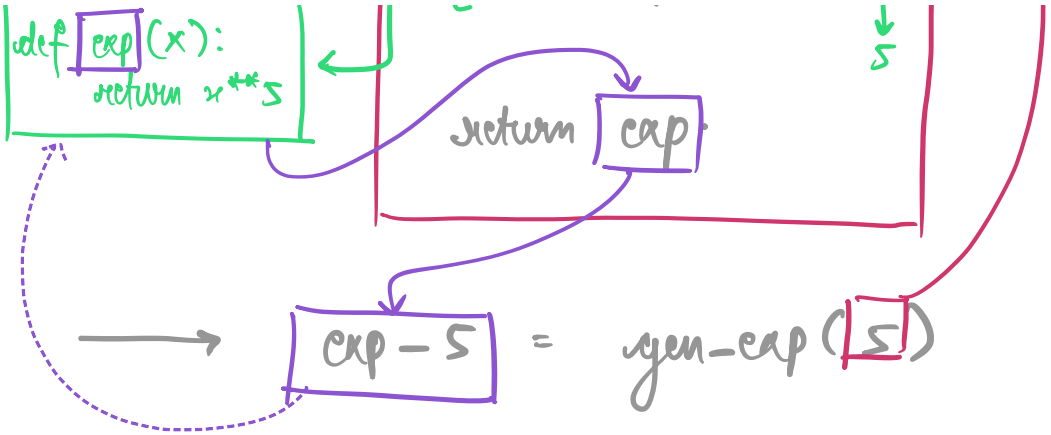
lambda f(x)

Higher Order Functions

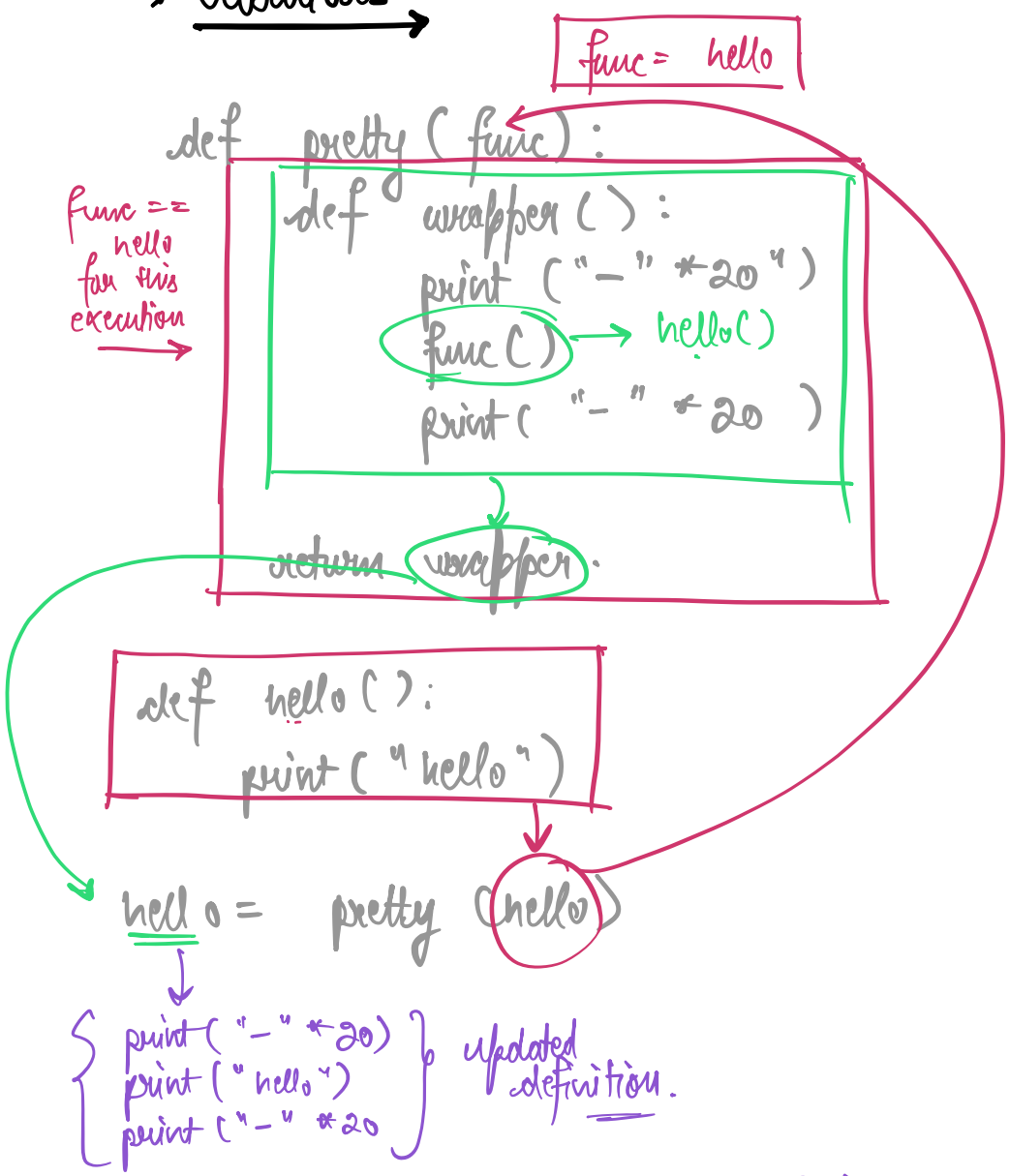
```
def gen_cap(n):
    def exp(x):
        return x**n
```

(n = 5)

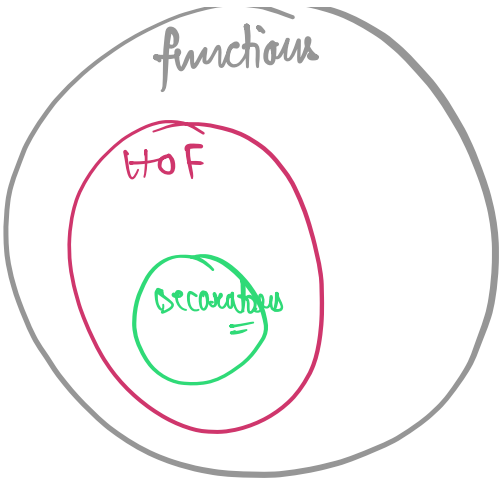
for this execution n = 5



Decorators →



(10) (10) 3 (2)



num1 = num1 || num2

$\log_2 10$

$\log_3 10$

$2^x = 10$

$3^y = 10$

$y < x$