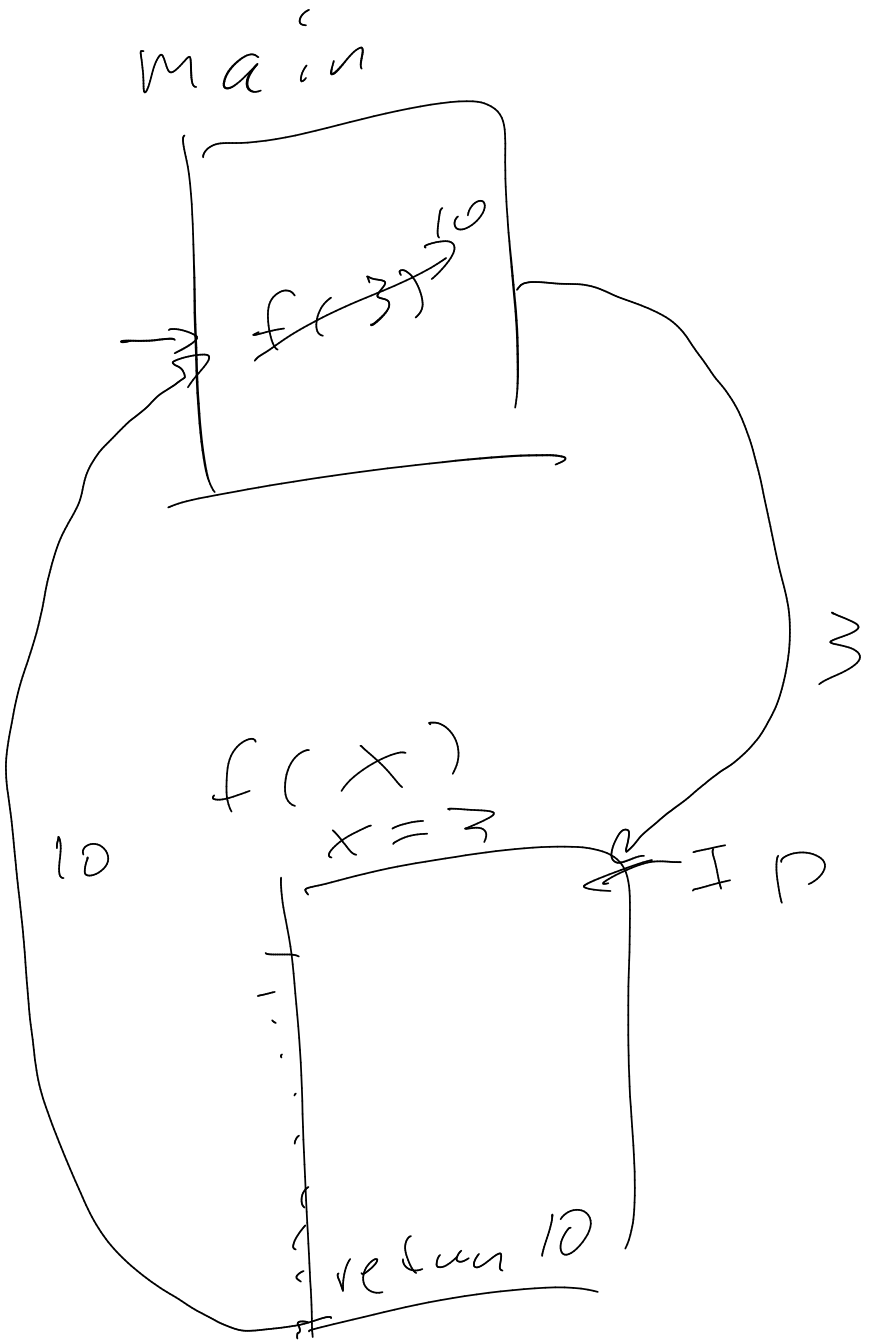
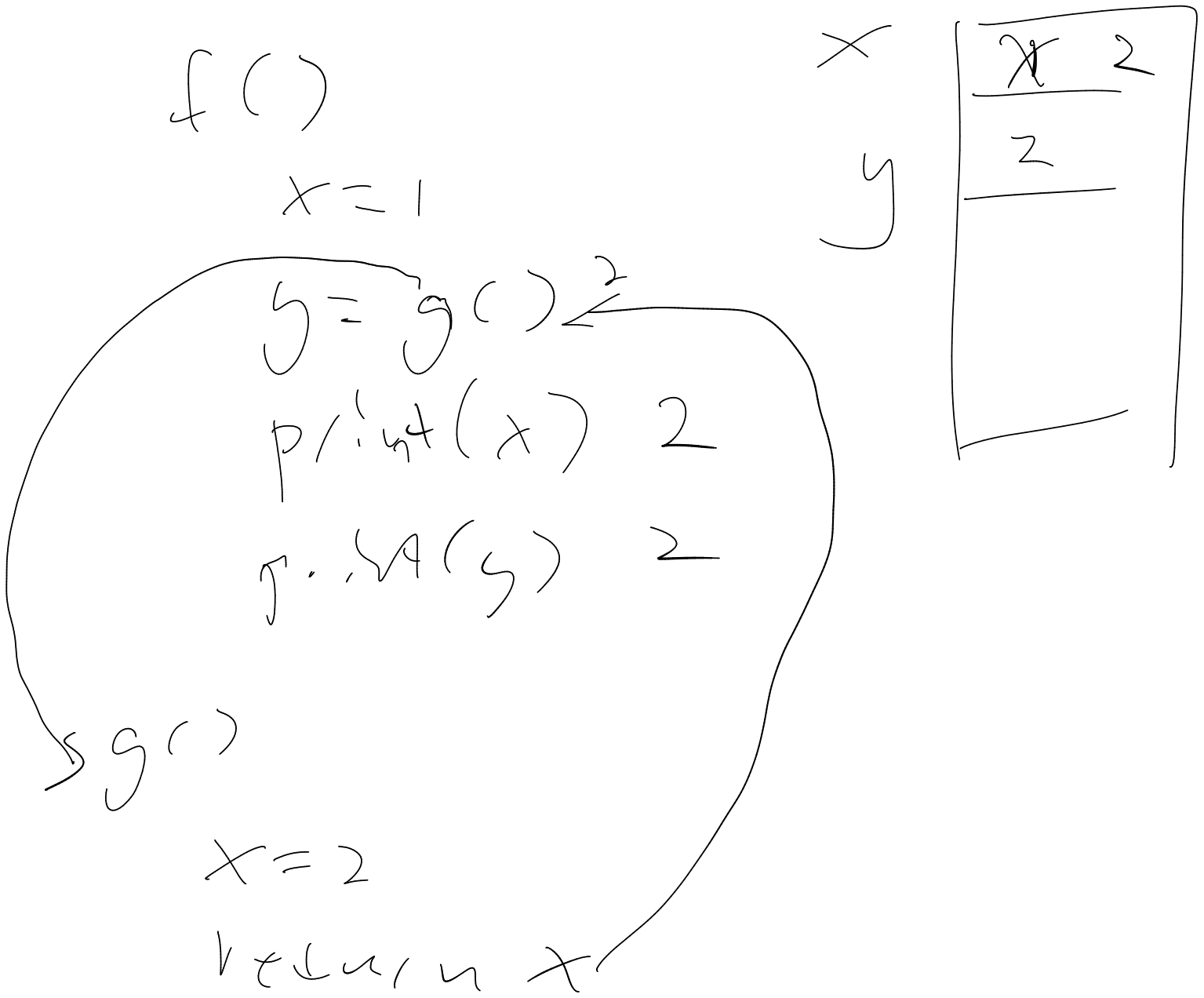
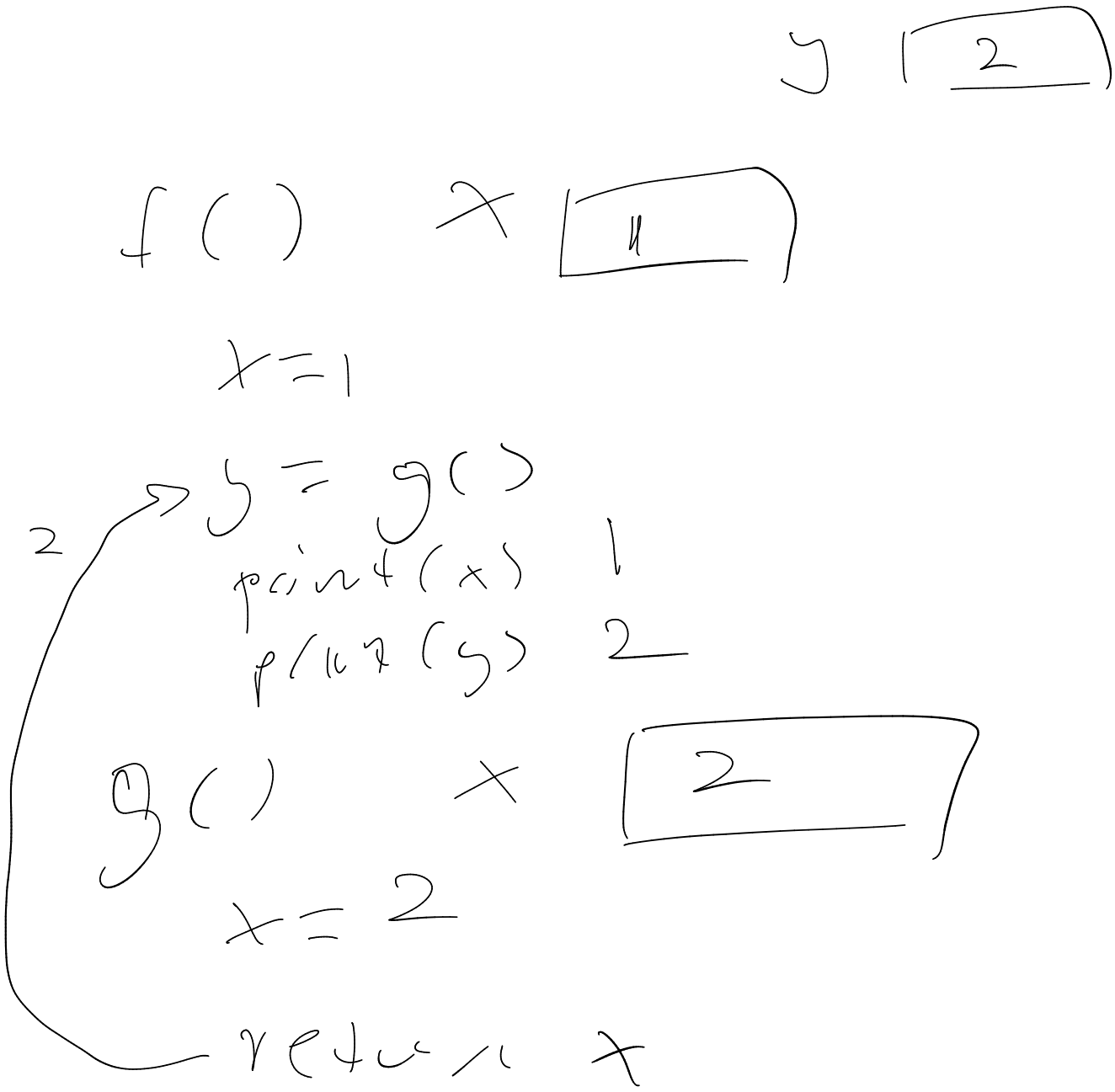

main
f(3)
10
3
f(x)
x=3
10
IP
return 10


f()
x=1
y=g()
print(x) 2
print(y) 2
g()
x=2
return x
x
y
x 2
2


y
2
f()
x
1
x=1
y=g()
2
printf(x) 1
printf(y) 2
g()
x
2
x=2
return x

$$fib(0) = 0$$

$$fib(1) = 1$$

$$fib(2) = 1$$

$$fib(3) = 2$$

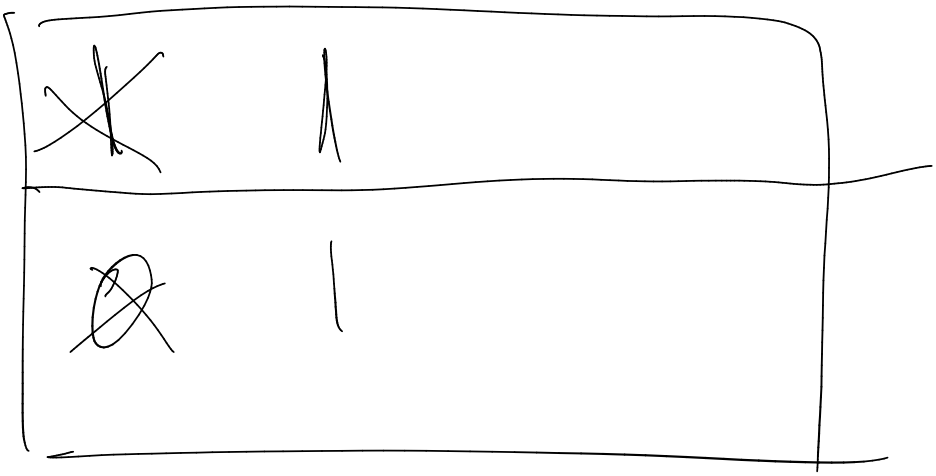
$$fib(4) = 3$$

$$fib(5) = 5$$

$$fib(6) = 8$$

Fn1

Fn2



f(3) → 2

Fn1 = f(2) → 1

Fn1 = f(1) → 1

Fn2 = f(0) → 0

Fn = Fn1 + Fn2 → 1

return 1

Fn2 = f(1) → 1

Fn = Fn1 + Fn2 → 1

return 2

Fn1

Fn2

~~1~~	1
~~0~~	0

~~fib(4) → 1~~

Fn1 = ~~fib(3)~~ 2

Fn1 = ~~fib(2)~~ 1

Fn1 = ~~fib(1)~~ 1

Fn2 = ~~fib(0)~~ 0

Fn = Fn1 + Fn2

return 1

Fn2 = ~~fib(1)~~ 1

Fn = Fn1 + Fn2 → 1

return 2

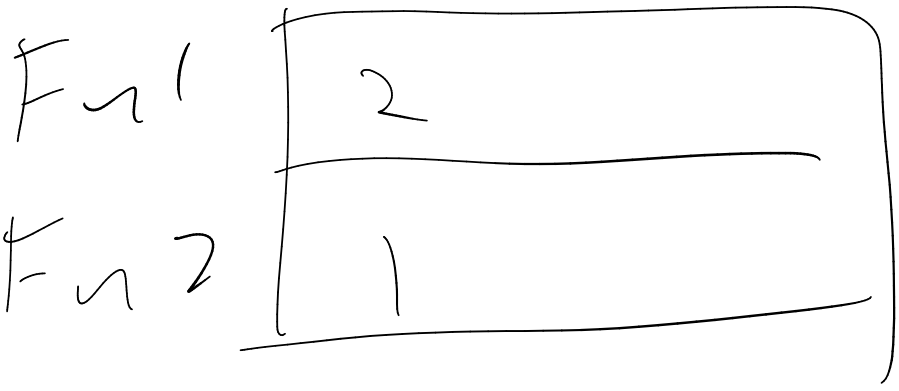
Fn2 = ~~fib(2)~~ 1

Fn1 = ~~fib(1)~~ 1

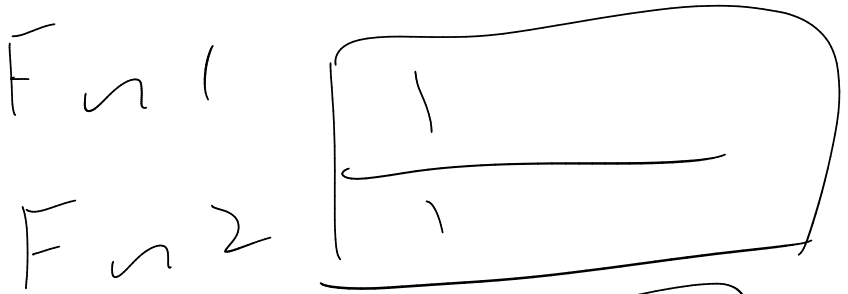
Fn2 = ~~fib(0)~~ 0

Fn = Fn1 + Fn2 → 0

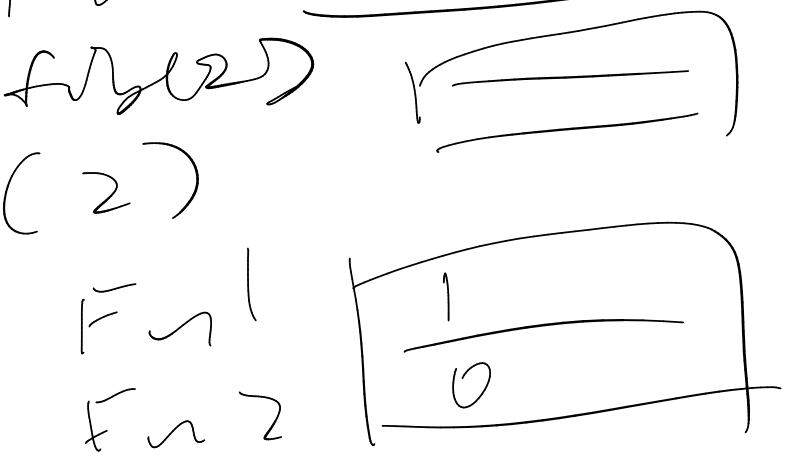
fib(4)

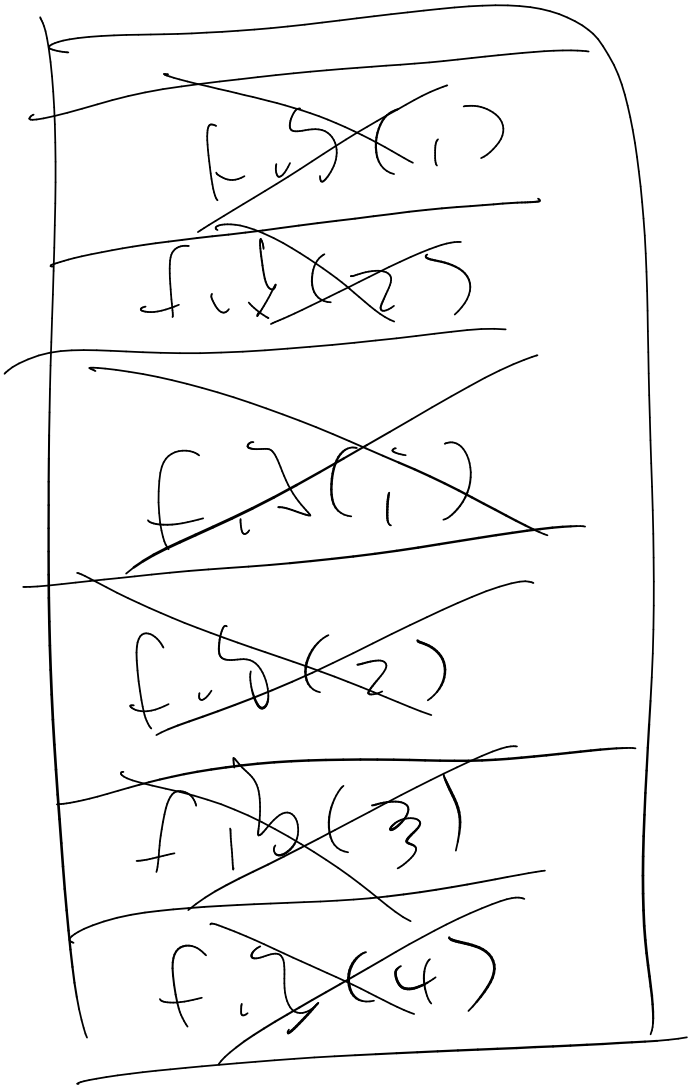


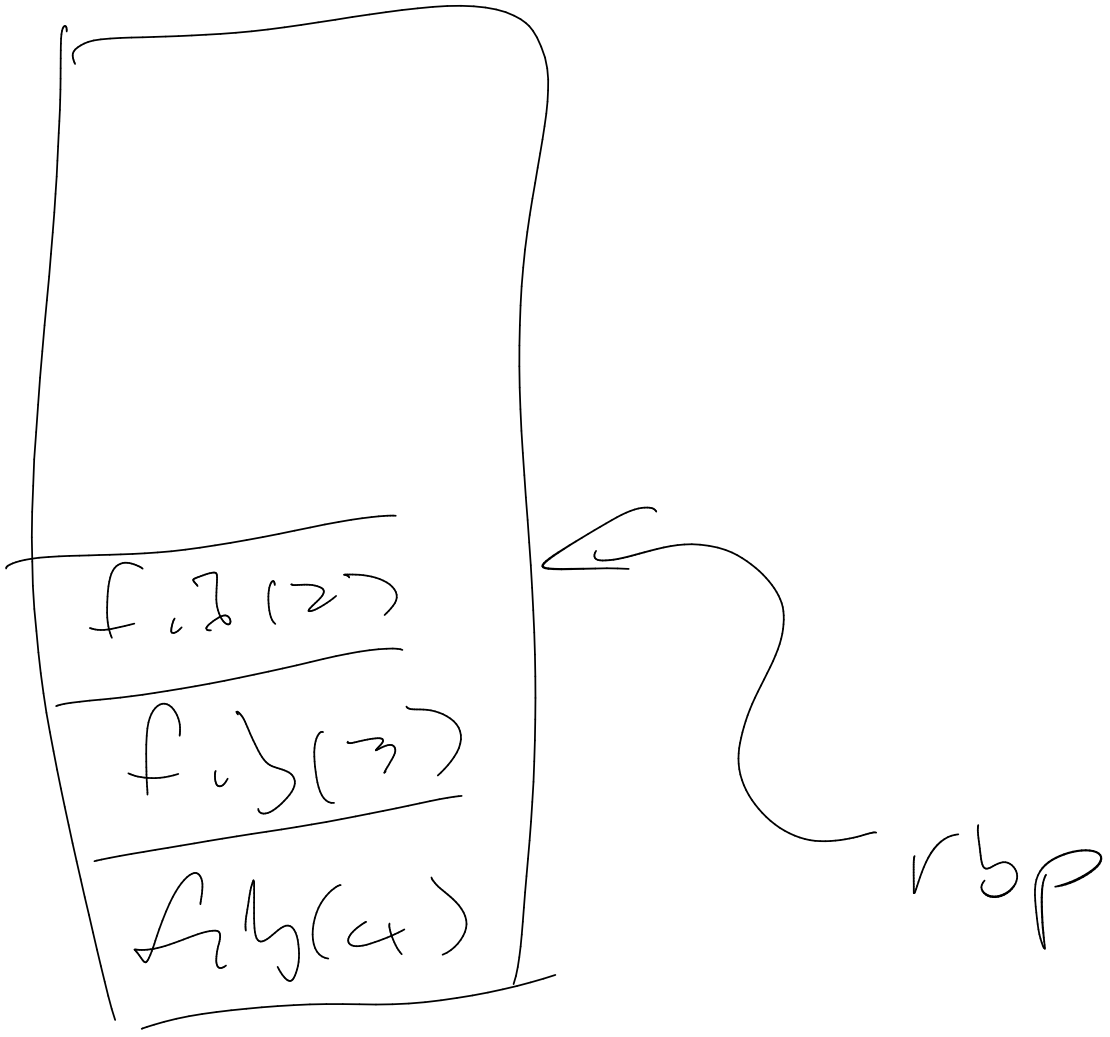
fib(3)

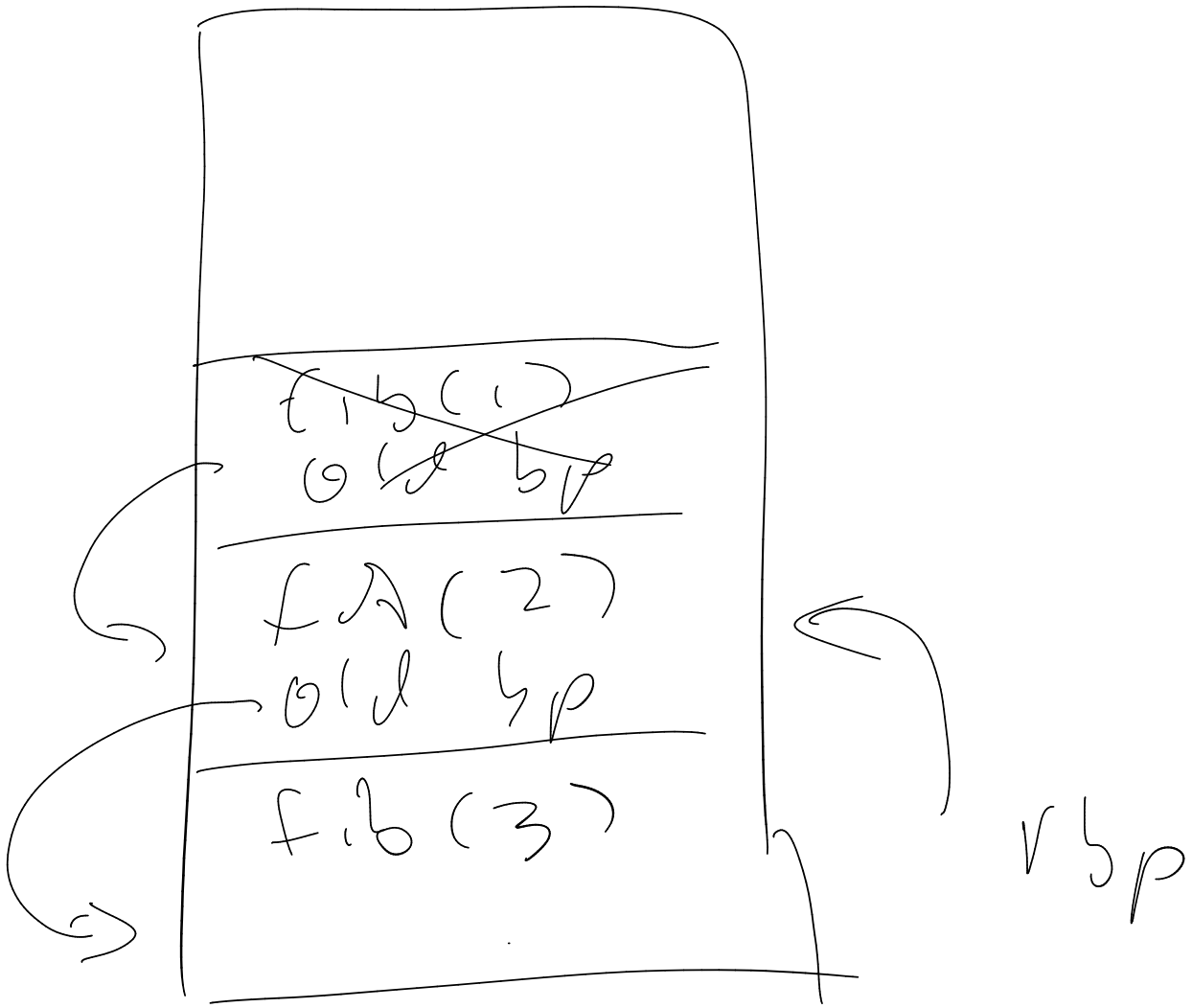


fib(2)






f(2)
f(3)
f(4)
rbp


fib(1)
old bp
fib(2)
old bp
fib(3)
rbp

fib(3)
at 30
return address
fib(4)
rbp