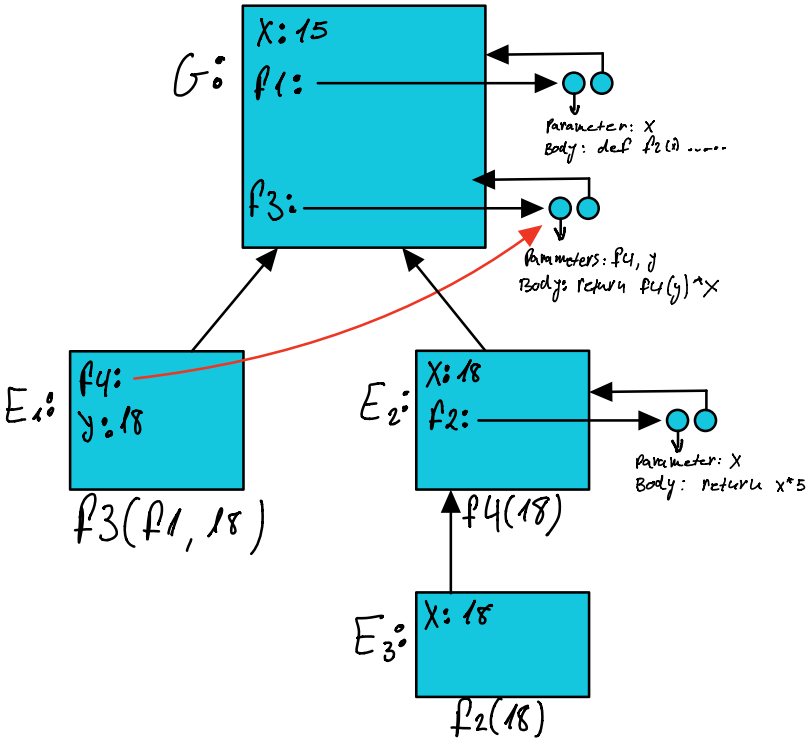
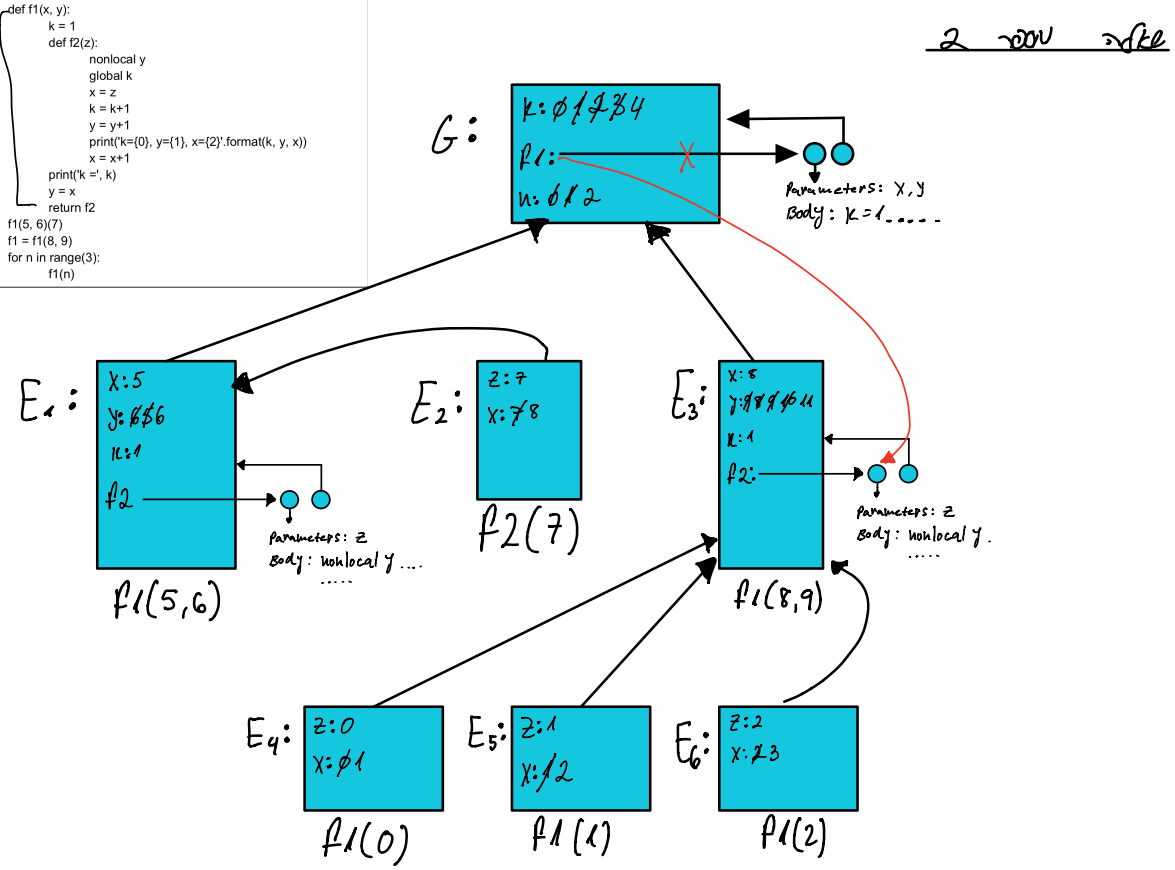
```
x=15
def f1(x):
        def f2(x):
                return x*5
        return f2(x)
def f3(f4,y):
        return f4(y)*x
print(f3(f1,x+3))
```



```
k = 0
def f1(x, y):
        k = 1
        def f2(z):
                nonlocal y
                global k
                x = z
                k = k+1
                y = y+1
                print('k={0}, y={1}, x={2}'.format(k, y, x))
                x = x+1
        print('k =', k)
        y = x
        return f2
f1(5, 6)(7)
f1 = f1(8, 9)
for n in range(3):
        f1(n)
```



:כך

1) $k = 1$
2) $k = 1$, $y = 6$, $x = 7$
3) $k = 1$
4) $k = 2$, $y = 9$, $x = 0$
5) $k = 3$, $y = 10$, $x = 1$
6) $k = 4$, $y = 11$, $x = 2$

```
def f1(x,f2):
    def f3(x):
        return x==0
    def f4(x):
        return x%10
    def f5(x):
        return x//10
    y=0
    while not f3(x):
        if f2(f4(x)): y = (lambda x:x+1)(y)
        x = f5(x)
    return y
print(f1(52,lambda x:x%2!=0 and x > 3))
print(f1(943,lambda x:x%3==0))
```