Principles of FP

1. Data should be protected from mutation (State change)
2. Declarative style
3. FCC (First Class citizen)

Functions are treated as FCC

HOF and Decorators

- HOF → return Funcs
- Decorators → Takes fn as input and return new F'(x)

lambda Function

lamba input : Output

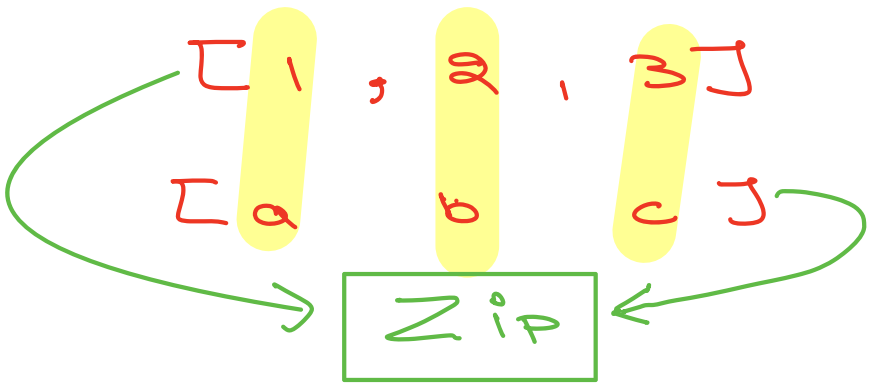
Map

1) It is replacement of For Loop in Functional Programming

map(func , *iterable)

Zip

1) Takes two or more iterables and get zipped Output
2) Output length == min(len *iterable)



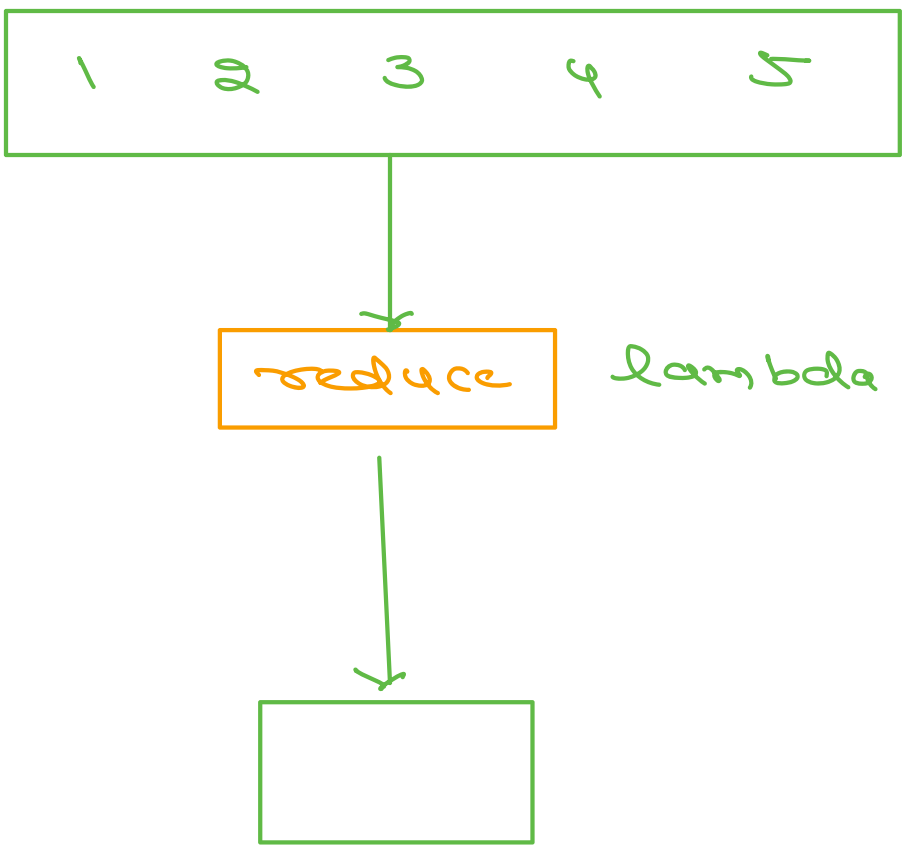
[(1 , a) (2 , b) (3 , c)]

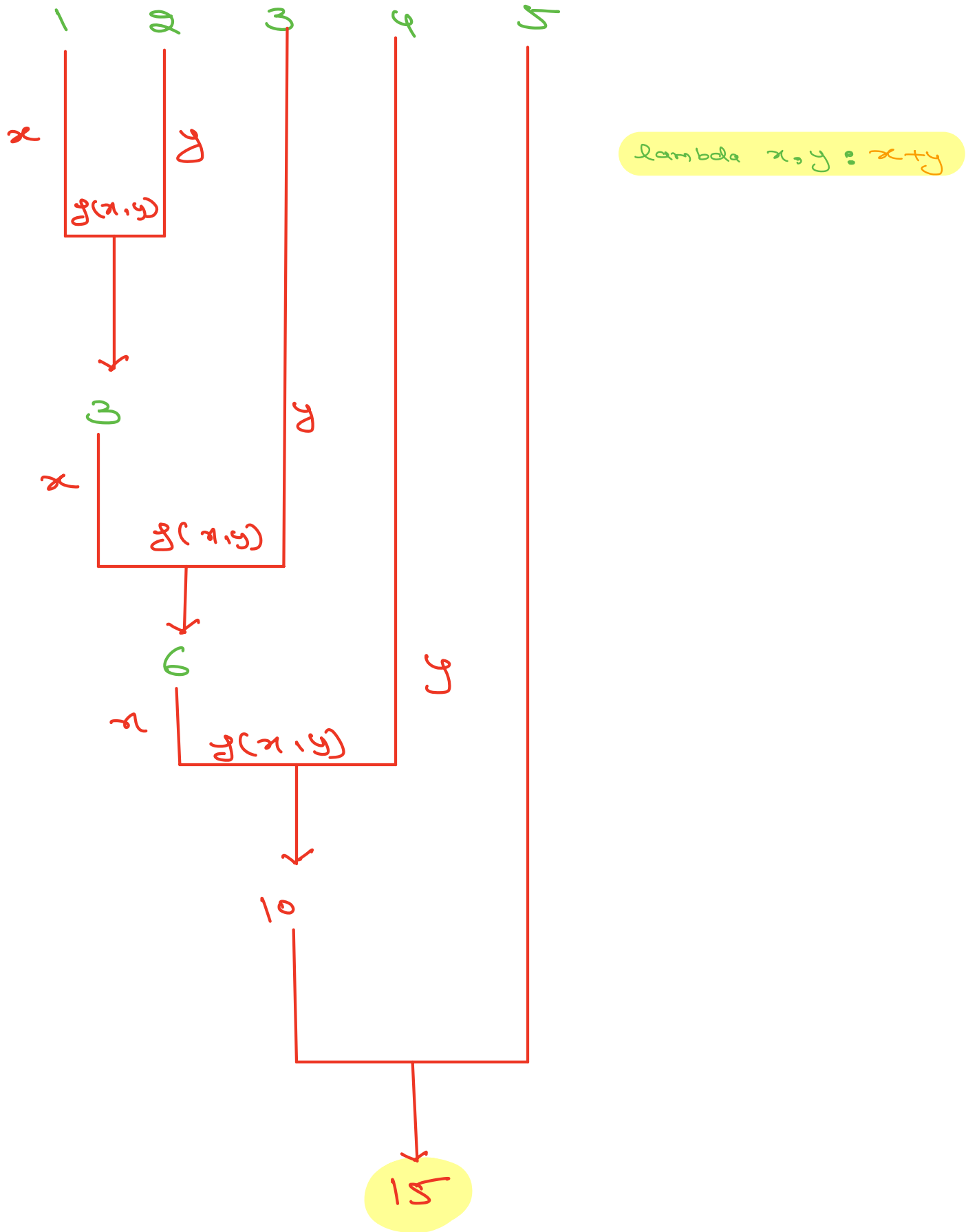
Reduce

① Takes a Function which accepts atleast two arguments

② Using the Function reduces the iterable to single Value

③ x will be picked from list if there is no 3rd Arg




1
2
3
4
5
x
y
f(x,y)
3
x
y
f(x,y)
6
z
y
f(x,y)
10
15
lambda x,y : x+y

Positional, *args, keyword Args, **kwargs
(default)