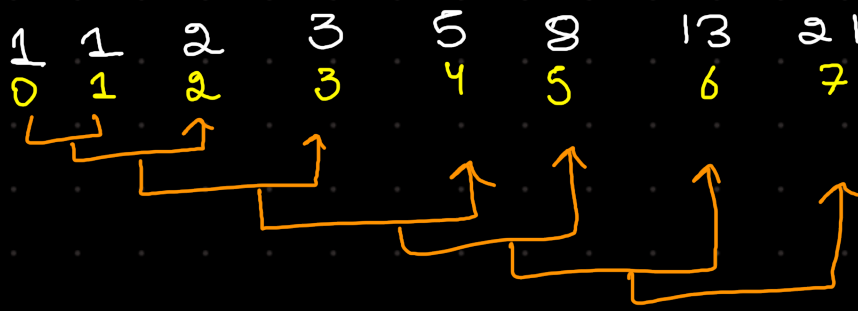


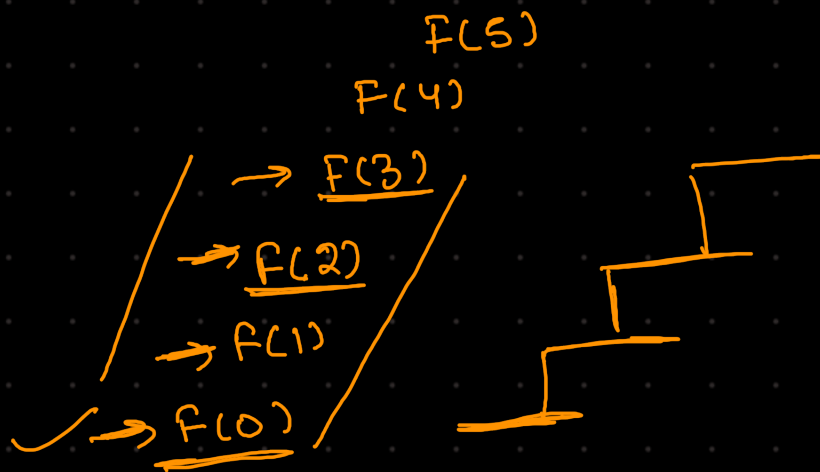
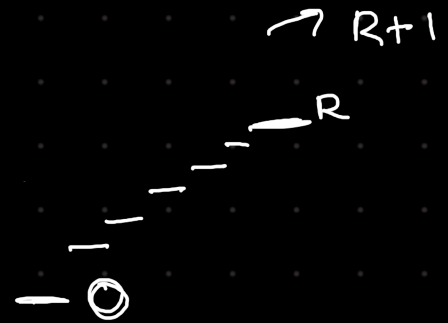
Fibonacci Series



① Base case $\Rightarrow F(0) = 1$

② Assume $F(R)$ \Rightarrow true

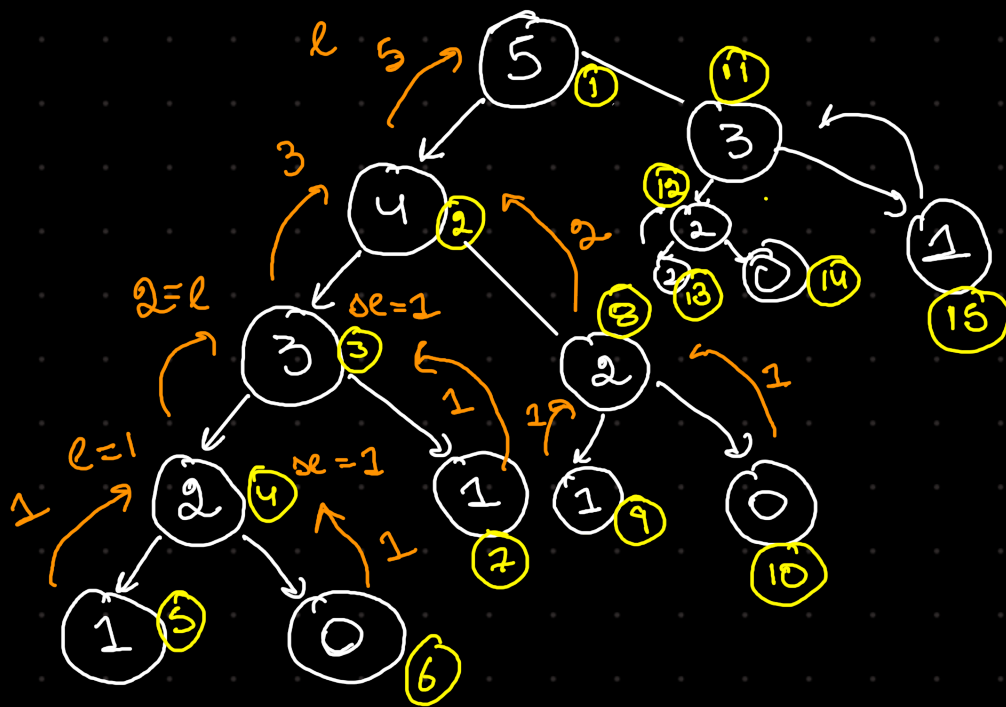
$$0 \leq i \leq R$$



last =
second - last =

$$F(\underline{n}) = F(\underline{n-1}) + F(\underline{n-2})$$

$\underline{n+1} \qquad \underline{n} \qquad \underline{n-1}$



```

def fib(n):
    # print(n)
    if(n==0):
        return 1
    if(n==1):
        return 1
    last = fib(n-1)
    secondLast = fib(n-2)
    ans = last + secondLast
    return ans

```

Q: Write a program for a given number n .

- 1] To print 1 to N .
- 2] To print N to 1.

1 to N

1
2
3
4
5



recursion
called first
head

N to 1

5
4
3
2
1



recursion
called
last

to

Assignment

Q-1 Sum of digits of a number

Q-2 Power of a number

1. Base case

2. Recursive call

3. Your calculation