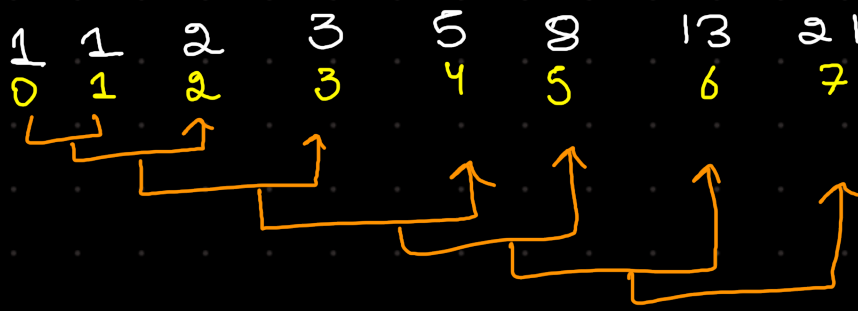


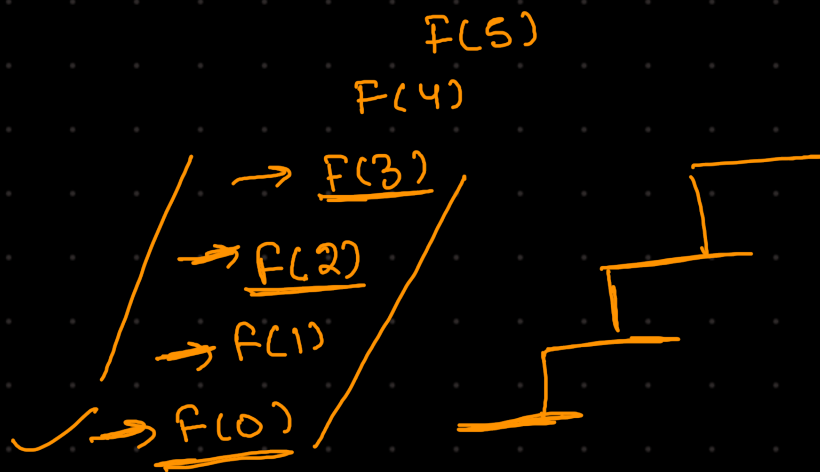
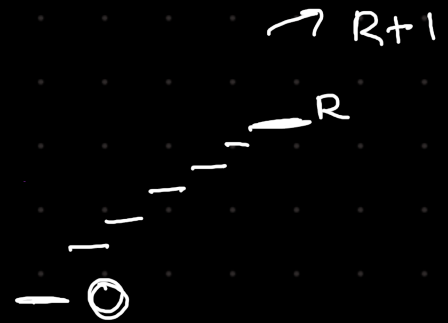
# Fibonacci Series



① Base case  $\Rightarrow F(0) = 1$

② Assume  $F(R)$   $\Rightarrow$  true

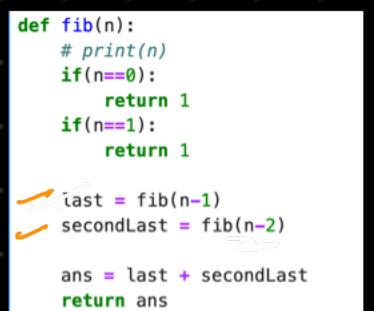
$$0 \leq i \leq R$$



last =  
second - last =

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

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



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

tail

## Assignment

Q-1 Sum of digits of a number

Q-2 Power of a number