**Fibonacci number without recursion**

def fibonacci(n):

a = 0

b = 1

if n < 0:

print("Incorrect input")

elif n == 0:

return a

elif n == 1:

return b

else:

for i in range(2, n+1):

c = a + b

a = b

b = c

return b

# Driver Program

print(fibonacci(9))

Time complexity- O(n)

Space Complexity-O(1)

**Fibonacci number with recursion**

def Fibo(a):

if a<= 0:

print("Incorrect input")

#First Fibo number is 0.

elif a == 1:

return 0

# Second Fibo number is 1

elif a == 2:

return 1

else:

return Fibo(a-1)+Fibo(a-2)

# Driver Program

print(Fibo(9))