**Assignment 1**

def recursive\_fibonacci(n):

if n <= 1:

return n

else:

return recursive\_fibonacci(n-1) + recursive\_fibonacci(n-2)

def non\_recursive\_fibonacci(n):

first = 0

second = 1

print(first)

print(second)

while n - 2 > 0:

third = first + second

first = second

second = third

print(third)

n -= 1

if \_\_name\_\_ == "\_\_main\_\_":

n = int(input("Enter the number: "))

print("Recursive")

for i in range(n):

print(recursive\_fibonacci(i))

print("Non-Recursive")

non\_recursive\_fibonacci(n)

**Output:**

Enter the number: 11

Recursive

0

1

1

2

3

5

8

13

21

34

55

Non-Recursive

0

1

1

2

3

5

8

13

21

34

55