**Code:-**

# Fibonacci Series using Non-recursive method

first\_num = int(input("Enter the first number of the fibonacci series: "))

second\_num = int(input("Enter the second number of the fibonacci series: "))

num\_of\_terms = int(input("Enter the number of terms:"))

# Fibonacci Series using recursive method

def fibonacci(first\_num):

if first\_num <= 1:

return first\_num

return fibonacci(first\_num-1) + fibonacci(first\_num-2)

print("The numbers in fibonacci series using Recursive Method are : ")

for i in range(num\_of\_terms):

print(fibonacci(i))

# Fibonacci Series using Non-recursive method

if num\_of\_terms <= 0:

print("Plese enter a positive integer")

print("The numbers in fibonacci series using Non-Recursive Method are : ")

print(first\_num)

print(second\_num)

while(num\_of\_terms-2):

third\_num = first\_num + second\_num

first\_num=second\_num

second\_num=third\_num

print(third\_num)

num\_of\_terms=num\_of\_terms-1

**Output:-**

C:\Users\asus\PycharmProjectsCommunity\LP3\venv\Scripts\python.exe "F:\7th Sem\LP3 Practical\DAA\_FInal\1\_Fibonacci\Recursive and non-recursive Fibonacci numbers.py"

Enter the first number of the fibonacci series: 7

Enter the second number of the fibonacci series: 9

Enter the number of terms:6

The numbers in fibonacci series using Recursive Method are :

0

1

1

2

3

5

The numbers in fibonacci series using Non-Recursive Method are :

7

9

16

25

41

66

Process finished with exit code 0