

## 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