

RECURSIVE

```
def recur_fibo(n):  
    if n <= 1:  
        return n  
    else:  
        return(recur_fibo(n-1) + recur_fibo(n-2))
```

nterms = 10

check if the number of terms is valid

```
if nterms <= 0:  
    print("Plese enter a positive integer")  
else:  
    print("Fibonacci sequence:")  
    for i in range(nterms):  
        print(recur_fibo(i))
```

OUTPUT:

Fibonacci sequence:

0

1

1

2

3

5

8

13

21

34

NON RECURSIVE

```
def fibonacci_iterative(n):  
    fib_series = [0, 1]  
    for i in range(2, n):  
        fib_series.append(fib_series[i-1] + fib_series[i-2])  
    return fib_series[:n]  
  
n_terms = 10  
fib_series = fibonacci_iterative(n_terms)  
print(f"Iterative Fibonacci series (first {n_terms} terms): {fib_series}")
```

OUTPUT:

Iterative Fibonacci series (first 10 terms): [0, 1, 1, 2, 3, 5, 8, 13, 21, 34]