

Q3=""3. Fibonacci sequence: Defined as a function F as  $F_n = F_{n-1} + F_{n-2}$ . Write a Python program which accepts a value for N (where  $N > 0$ ) as input and pass this value to the function. Display suitable error message if the condition for input value is not followed ""

print(Q3)

```
def fibonacci_sequence(N):
    if N <= 0:
        print("Error: N must be greater than 0.")
        return
    fib_list = []
    a, b = 0, 1
    for _ in range(N):
        fib_list.append(a)
        a, b = b, a + b
    print("Fibonacci sequence up to", N, "terms:", fib_list)

try:
    N = int(input("Enter the number of terms (N > 0): "))
    fibonacci_sequence(N)
except ValueError:
    print("Error: Please enter a valid integer.")
```

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3. Fibonacci sequence: Defined as a function F as  $F_n = F_{n-1} + F_{n-2}$ . Write a Python program which accepts a value for N (where  $N > 0$ ) as input and pass this value to the function. Display suitable error message if the condition for input value is not followed  
Enter the number of terms ( $N > 0$ ): 5  
Fibonacci sequence up to 5 terms: [0, 1, 1, 2, 3]