

# Sequence Explorer

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**Details of Project:**I'm implementing this project by using Python Programming Language.

## Code

```
Sequenceexplorer.py +
1 def fib(n):
2     if n == 1 or n == 0:
3         return n
4     return fib(n-1)+fib(n-2)
5 n=int(input())
6 print(fib(n))
7
```

## Input and Output

```
STDIN
5
Output:
5
```

**Explanation:** In this Program I have implemented Sequence Explorer which is nothing but  $n^{\text{th}}$  Fibonacci series by using Recursion. In the Fibonacci series the first two terms are fixed i.e., 0 and 1 and the next term will be sum of two previous terms. If  $n=1$  or 0 it will return the same value Otherwise it will return  $\text{fib}(n-1)+\text{fib}(n-2)$ . This will run repeatedly until  $n$  value equal to given value.

**Conclusion:**

Finally I got the desired output of  $5^{\text{th}}$  Fibonacci series by how, 0 1 1 2 3 5.