

# 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))
```

## Input and Output:

STDIN

5

---

Output:

5

## Explanation:

In this Program I have Implemented Sequence Explorer which is nothing but printing nth fibonacci number using recursion. The fibonacci series is a sequence of numbers where each number is the sum of the two preceding numbers. It starts with 0 and 1 and each subsequent number is the sum of the two

preceding numbers. The program also includes a print function to print the nth Fibonacci number using recursion. I read the input in the form of string and it is type casted into integer type. By using keyword "def" we define a recursive function "fib()" that calls itself repeatedly by passing the parameter "n". If n value equals to 0 or 1 it returns n value. If the above condition is not true the fib() function calls itself recursively to calculate the nth term by adding (n-1)th and (n-2)th terms

## **Conclusion:**

Finally I have got the desired output the nth Fibonacci number. My input is 5 and my desired output is 5

0 1 1 2 3 5