SEQUENCE EXPLORER

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Details of project: I'm implementing this project by using python programming language

Code:

sequenceecplorer.py

```
def fib(n):
  if(n==0 or n==1):
    return n
  return fib(n-1)+fib(n-2)
n=int(input())
print(fib(n))
```

Input and Output:

STDIN

5

Output:

5

Explanation:

In this program I have implemented Sequence Explorer which is nothing but generating the Fibonacci series to a given number of n^{th} term using recursion, in which I have taken **5** as an input from user and I used functions in this I have used if condition **(n==0 or n==1)** that means if one of the expression is true it will returns n value means 5 otherwise it will goes to returns **fib(n-1)+fib(n-2)** means **fib(5-1)+fib(5-2)** again we have to run the same function until it becomes **n==0 or n==1** then we have to add one **fib(n-1) to fib(n-2)** to displayed the output of **fin(n).**

Conclusion:

Finally I have got the desired output **5^{th}** term of the Fibonacci is **5,** by how the Fibonacci of **5** is **0 1 1 2 3 5 .** Here we have to print the **n^{th}** Fibonacci so our n value is **5** so, the **5^{th}** term is **5** that's why we got the output as **5.**