Sequence Explorer

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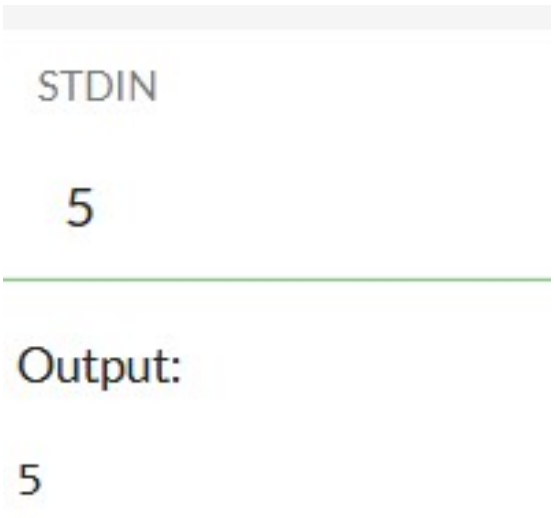
Details of the Project:I'm Implementing This Project By Using Python Programming Language

Code:

Sequence Explorer.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



Explanation:

In this program I have implemented Sequence Explorer which is nothing but it is a number sequence where each number is the sum of two preceeding ones,usually starting with 0 and 1.here i implemented the program nth fibonacci number recusing using recursion .The name recursion is nothing but the function calling itself.Basically It take input as **"n"** here i read input as string which

is type casted into integer.I defined a user defined keyword "**def**" then It defined a fuction as "**fib**()" because To use a block of code repeatedly.In this function i pass one parameter as "**n**".

after that i used "**if**" condition to check if n is equal to 0 and it returns 0 or else if n is equal to 1 then it returns 1.If the above condition is not true then it directly return the fib function i.e **fib(n-1)+fib(n-2)** it returns the sum of the two recursive calls.this calculates the fibonacci number for the given input "**n**".by using the print () it prints the **fib(n)**

Conclusion:

Finally i got the desired output to print the nth number of the fibonacci series

0 1 1 2 3 5

my input is 5 and my desired output is 5