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IoT Practical : 05

Aim: Open the python idle editor and run simple Python scripts such as to print Fibonacci number

Steps:

Steps: 1) Click on the IDLE.
2) Create a new Script and Run

```
""" Recursive function to print Fibonacci sequence """

def recur_fibo():
    nterms = int(input("How many terms? "))
    n1, n2 = 0, 1
    count = 0

    if nterms <= 0:
        print("Please enter a positive integer")
    elif nterms == 1:
        print("Fibonacci sequence upto", nterms, ":")
        print(n1)
    else:
        print("Fibonacci sequence:")
        while count < nterms:
            print(n1)
            nth = n1 + n2
            n1 = n2
            n2 = nth
            count += 1
recur_fibo()
```

p5 try.py - E:/fffiiles/college pracs and projects/iot sem 5/p5 try.py (3.8.3)

File Edit Format Run Options Window Help

```
def recur_fibo():
    nterms = int(input("How many terms? "))

    # first two terms
    n1, n2 = 0, 1
    count = 0

    # check if the number of terms is valid
    if nterms <= 0:
       print("Please enter a positive integer")
    # if there is only one term, return n1
    elif nterms == 1:
       print("Fibonacci sequence upto",nterms,":")
       print(n1)
    # generate fibonacci sequence
    else:
       print("Fibonacci sequence:")
       while count < nterms:
           print(n1)
           nth = n1 + n2
           # update values
           n1 = n2
           n2 = nth
           count += 1
recur_fibo()
```

Python 3.8.3 Shell

File Edit Shell Debug Options Window Help

```
Python 3.8.3 (tags/v3.8.3:6f8c832, May 13 2020, 22:20:19) [M
SC v.1925 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more
information.
>>>
====== RESTART: E:/fffiiles/college pracs and projects/iot s
em 5/p5 try.py =====
How many terms? 10
Fibonacci sequence:
0
1
1
2
3
5
8
13
21
34
>>>
```