

EXPERIMENT NO – 1 (C)

C] Write a program to generate the Fibonacci series.

CODE:

A screenshot of a Python IDE window titled "EXPERIMENT NO.1(C).py - E:/PRACTICAL/PYTHON PRACTICAL/SYBSCIT_NISHAGUPTA/EXPERI...". The window contains a Python script for generating the Fibonacci sequence. The code includes comments, variable initialization, input handling, and a while loop for calculating the sequence. The IDE interface shows a menu bar with File, Edit, Format, Run, Options, Window, and Help. The status bar at the bottom displays system information: 26°C, Rain showers, and the date 10-08-2022 at 23:11.

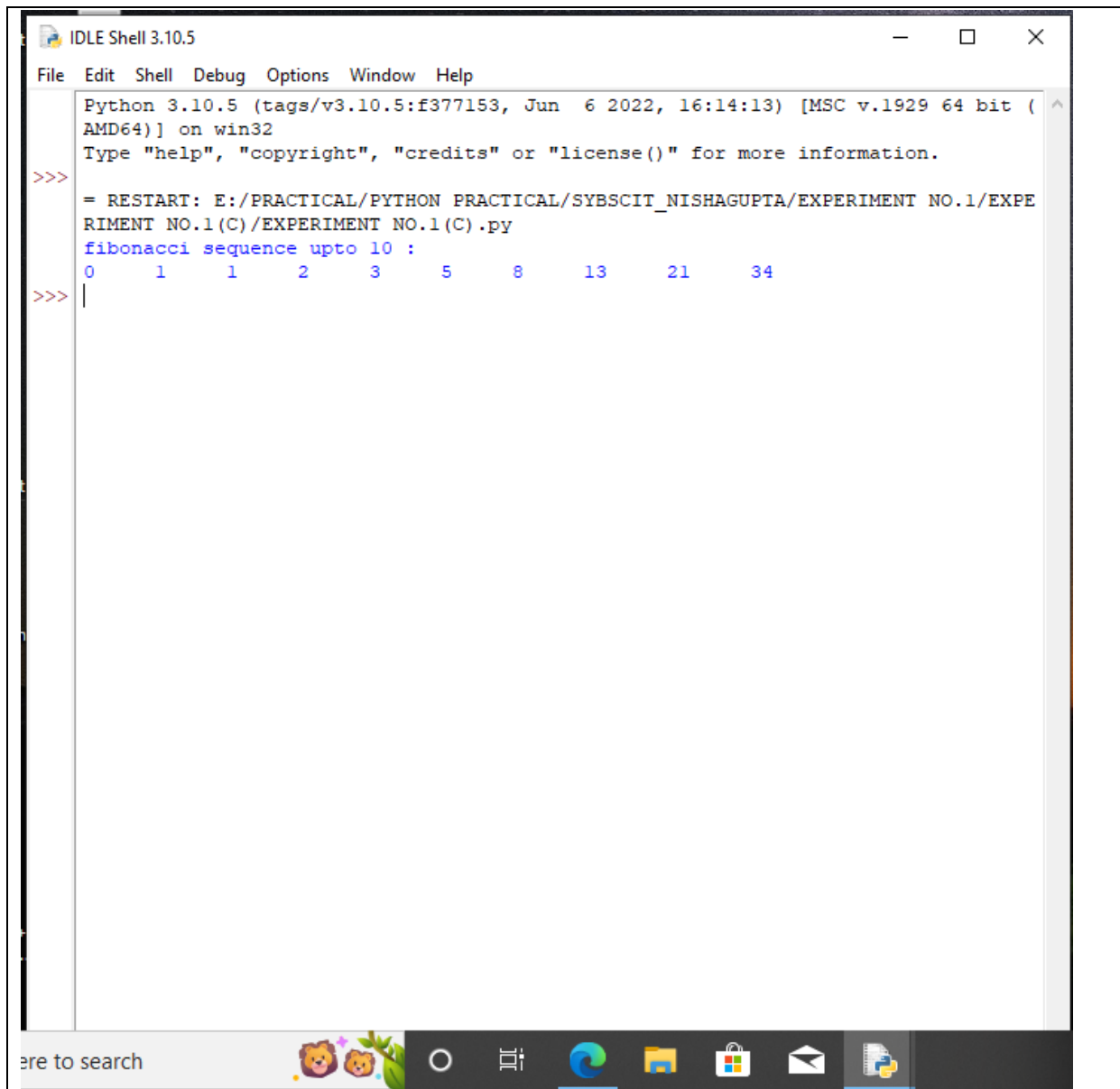
```
EXPERIMENT NO.1(C).py - E:/PRACTICAL/PYTHON PRACTICAL/SYBSCIT_NISHAGUPTA/EXPERI...
File Edit Format Run Options Window Help
# program to display the fibonacci sequence up n-th terms wheren is provided
# change this value for a different result
nterms = 10

# uncomment to take input from the user
# nterms = int(input("how many terms?"))

# first two terms
n1 = 0
n2 = 1
count = 2

# check if the number of terms is valid
if nterms <= 0:
    print("please enter a positive integer")
elif nterms == 1:
    print("fibonacci sequence upto",nterms,":")
    print(n1)
else:
    print("fibonacci sequence upto",nterms,":")
    print(n1,"    ",n2,end='    ')
    while count < nterms:
        nth = n1 + n2
        print(nth,end='    ')
        #update values
        n1 = n2
        n2 = nth
        count +=1
```

OUTPUT:



```
Python 3.10.5 (tags/v3.10.5:f377153, Jun 6 2022, 16:14:13) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:/PRACTICAL/PYTHON PRACTICAL/SYBSCIT_NISHAGUPTA/EXPERIMENT NO.1/EXPERIMENT NO.1(C)/EXPERIMENT NO.1(C).py
fibonacci sequence upto 10 :
0      1      1      2      3      5      8      13      21      34
>>> |
```

CONCLUSION: successful program.