

Ex no 2 a, Develop a program to generate Fibonacci sequence of length (N). Read N from the console.

Step	a	b	Next (c)
1	0	1	1
2	1	1	2
3	1	2	3
4	2	3	5
5	3	5	8
6	5	8	13

0 1 1 2 3 5 8 13 21 34

In simple words: Each Fibonacci number is the sum of the previous two numbers.

Fibonacci Sequence

```
n = int(input("Enter the length of Fibonacci sequence: "))
```

```
a = 0
```

```
b = 1
```

```
print("Fibonacci sequence:")
```

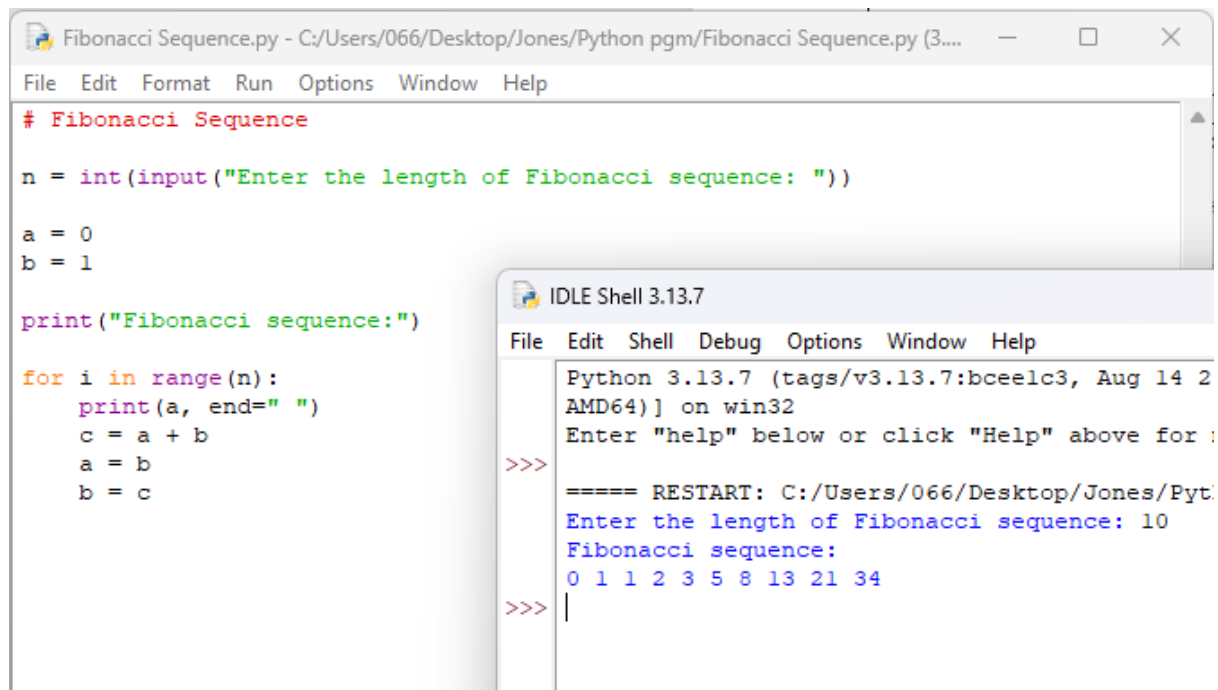
```
for i in range(n):
```

```
    print(a, end=" ")
```

```
    c = a + b
```

```
    a = b
```

```
    b = c
```



The image shows a Python IDE window titled "Fibonacci Sequence.py" with the following code:

```
# Fibonacci Sequence

n = int(input("Enter the length of Fibonacci sequence: "))

a = 0
b = 1

print("Fibonacci sequence:")

for i in range(n):
    print(a, end=" ")
    c = a + b
    a = b
    b = c
```

Below the code editor is the "IDLE Shell 3.13.7" window, which displays the program's execution:

```
Python 3.13.7 (tags/v3.13.7:bceelc3, Aug 14 2024) on win32
Enter "help" below or click "Help" above for :

>>> ===== RESTART: C:/Users/066/Desktop/Jones/Python pgm/Fibonacci Sequence.py
Enter the length of Fibonacci sequence: 10
Fibonacci sequence:
0 1 1 2 3 5 8 13 21 34
>>> |
```

Output