

Code:

```
41427_LP-III_A1.py X
E: > BE > 41427_LP-III_Codes > DAA > 41427_LP-III_A1.py > ...
1  def fibo_recursive(n):
2      if n == 1:
3          return 0
4      elif n == 2:
5          return 1
6      return fibo_recursive(n - 1) + fibo_recursive(n - 2)
7
8
9  def fibo_iterative(n):
10     a, b = 0, 1
11     if n == 1:
12         return a
13     elif n == 2:
14         return b
15     while n - 2 > 0:
16         c = a + b
17         a, b = b, c
18         n = n - 1
19     return c
20
21
22     num = int(input("Enter the number of fibonacci numbers required : "))
23     iterative, recursive = [], []
24     for i in range(1, num+1):
25         iterative.append(str(fibo_iterative(i)))
26         recursive.append(str(fibo_recursive(i)))
27     print('Iterative sequence: ' + ' '.join(iterative))
28     print('Recursive sequence: ' + ' '.join(recursive))
29
```

Output:

```
Windows PowerShell
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PS C:\Users\abhi> & C:/Users/abhi/AppData/Local/Programs/Python/Python311/python.exe e:/BE/41427_LP-III_Codes/DAA/41427_LP-III_A1.py
Enter the number of fibonacci numbers required : 7
Iterative sequence: 0 1 1 2 3 5 8
Recursive sequence: 0 1 1 2 3 5 8
PS C:\Users\abhi>
```