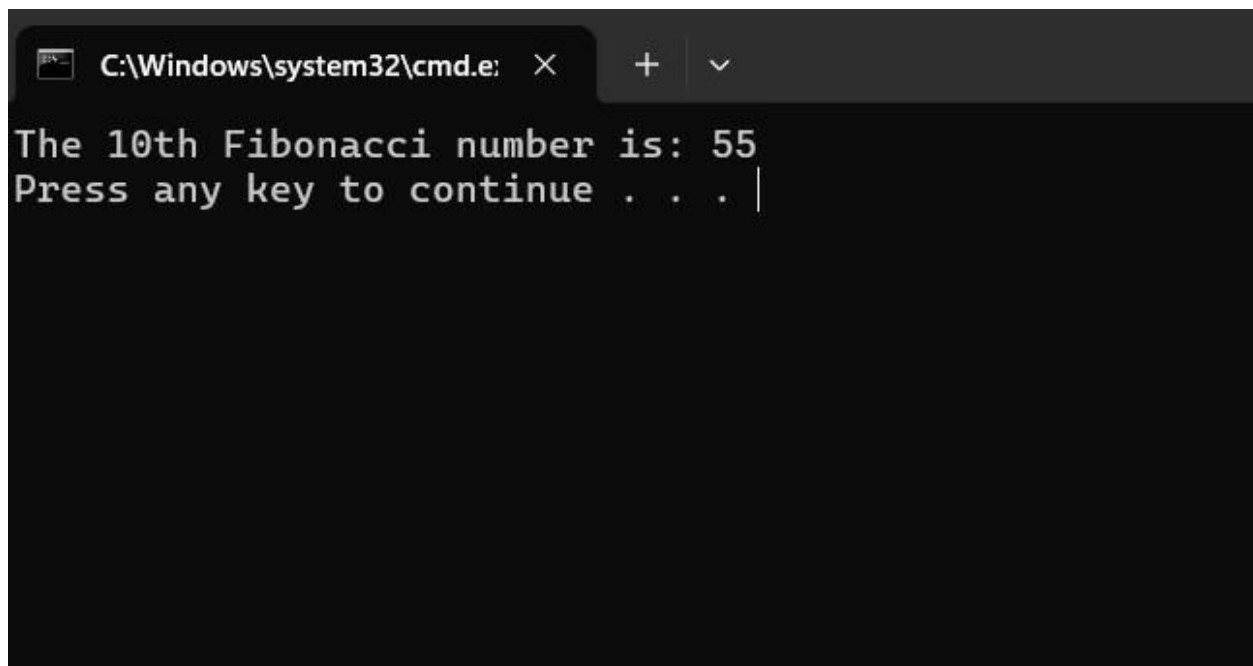


98)Dynamic programming

CODE:

```
def fibonacci(n, memo={}):    if
n in memo:
    return memo[n]    if
n <= 1:    return n
    memo[n] = fibonacci(n-1, memo) + fibonacci(n-2, memo)    return
memo[n]
n = 10
result = fibonacci(n)
print(f"The {n}th Fibonacci number is: {result}")
```

OUTPUT:

A screenshot of a Windows command prompt window. The title bar shows the path 'C:\Windows\system32\cmd.e' with a close button. The window content displays the output of the program: 'The 10th Fibonacci number is: 55' followed by 'Press any key to continue . . . |' with a cursor. The background is black and the text is white.

TIME COMPLEXITY : $O(n)$