

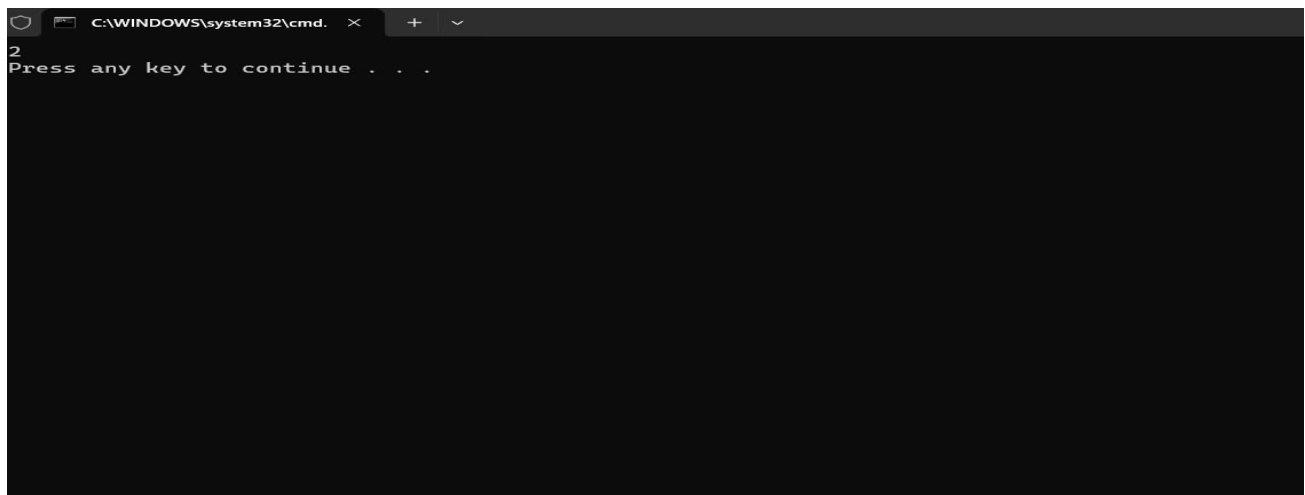
31) Counting Elements Given an integer array arr, count how many elements x there are, such that $x + 1$ is also in arr. If there are duplicates in arr, count them separately. Example Input: arr = [1,2,3] Output: 2 Explanation: 1 and 2 are counted cause 2 and 3 are in arr.

CODE:

```
def count_elements(arr):
    count = 0
    num_set = set(arr)
    for x in arr:
        if x + 1 in num_set:
            count += 1
    return count
arr1 = [1, 2, 3]

print(count_elements(arr1))
```

OUTPUT:

A screenshot of a Windows command prompt window. The title bar at the top shows the path 'C:\WINDOWS\system32\cmd.' and standard window controls. The command prompt itself has a black background with white text. It displays the number '2' on the first line, which is the output of the Python script. On the second line, it shows the prompt 'Press any key to continue . . .'.

TIME COMPLEXITY : $O(n)$