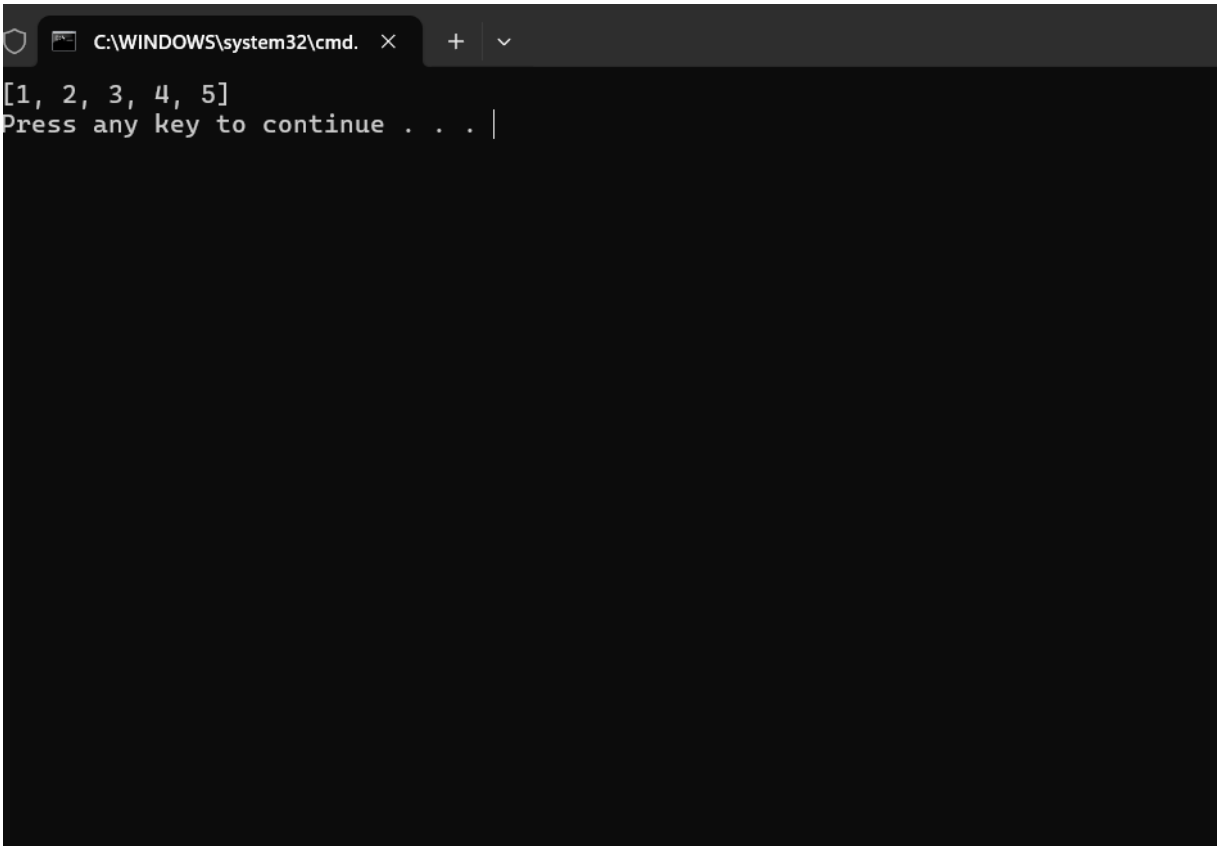
46) Sort Colors Given an array nums with n objects colored red, white, or blue, sort them in-place so that objects of the same color are adjacent, with the colors in the order red, white, and blue. We will use the integers 0, 1, and 2 to represent the color red, white, and blue, respectively. You must solve this problem without using the library's sort function. Example 1: Input: nums = [2,0,2,1,1,0] Output: [0,0,1,1,2,2]

CODE:

```
def sort(a):
    for i in range(len(a)):
        min_index = i
        for j in range(i + 1, len(a)):
            if a[j] < a[min_index]:
                min_index = j
        a[i], a[min_index] = a[min_index], a[i]
    return a

a = [5, 4, 3, 2, 1]
print(sort(a))
```

OUTPUT:



TIME COMPLEXITY : $O(n^2)$