

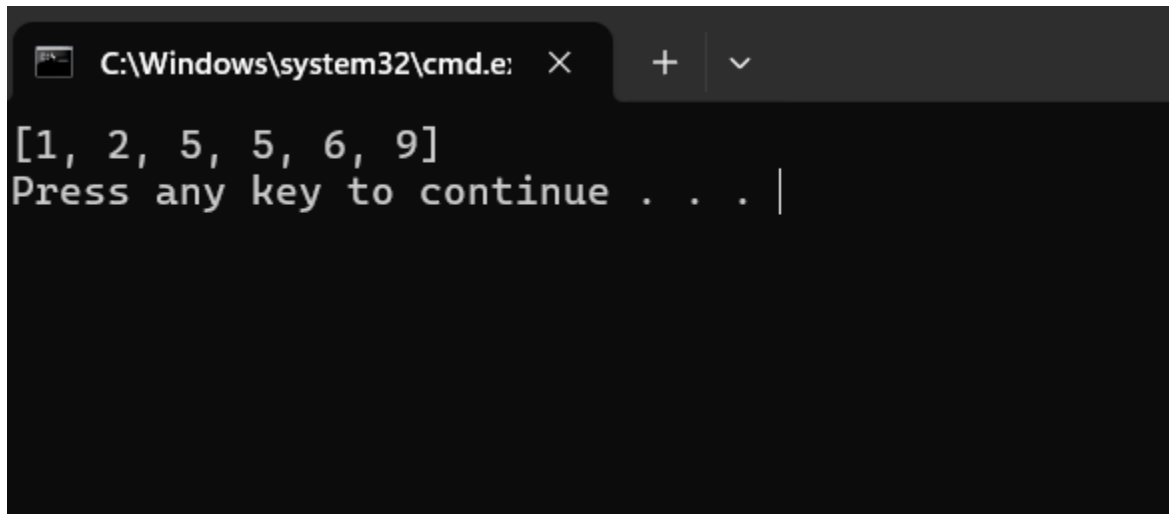
132)Selection sort

CODE:

```
def selection_sort(arr):
    n = len(arr)
    for i in range(n):
        min_idx = i
        for j in range(i+1, n):
            if arr[j] < arr[min_idx]:
                min_idx = j
        arr[i], arr[min_idx] = arr[min_idx], arr[i]
    return arr

# Example Usage
random_array = [5, 2, 9, 1, 5, 6]
print(selection_sort(random_array)) # Output: [1, 2, 5, 5, 6, 9]
```

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: '[1, 2, 5, 5, 6, 9]' followed by the prompt 'Press any key to continue . . . |'.

TIME COMPLEXITY : $O(n^2)$