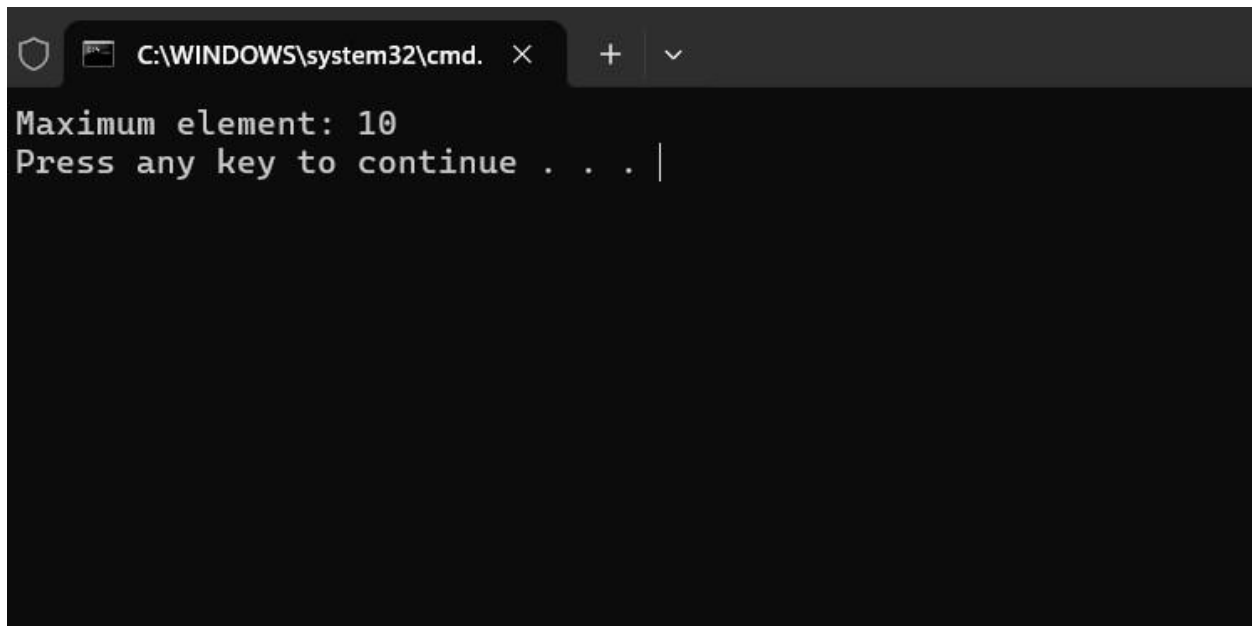


## 78)Exhaustive Search

CODE:

```
def exhaustive_search_max(arr):  
    if not arr:  
        return None  
    max_val = arr[0]    for  
    num in arr:  
        if num > max_val:  
            max_val = num  
    return max_val  
  
numbers = [5, 8, 3, 9, 2, 10]  
max_num=exhaustive_search_max(nu  
mbers) print("Maximum element:",  
max_num)
```

OUTPUT:

A screenshot of a Windows command prompt window. The title bar shows the path 'C:\WINDOWS\system32\cmd.' and standard window controls. The command prompt displays the output of the Python script: 'Maximum element: 10' followed by 'Press any key to continue . . . |' with a vertical cursor. The background is black and the text is white.

```
Maximum element: 10  
Press any key to continue . . . |
```

TIME COMPLEXITY :  $O(n)$