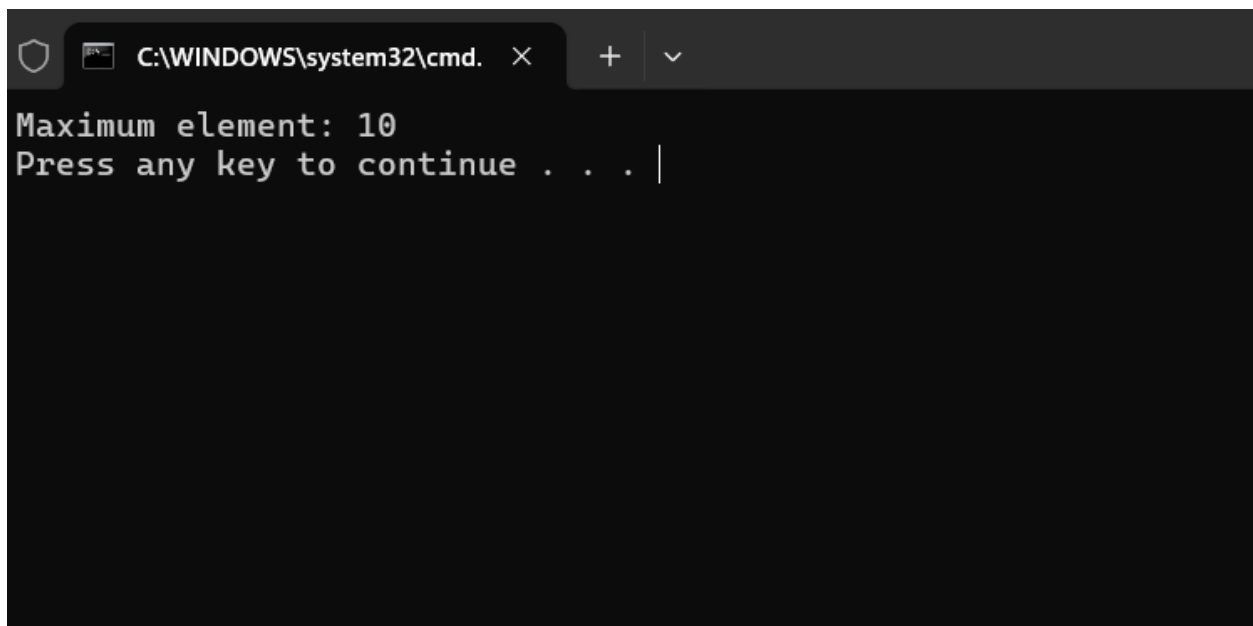


78)Exhaustive Search

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(numbers)  
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 'Maximum element: 10' and 'Press any key to continue . . . |', where the vertical bar indicates the cursor is waiting for a key press.

```
C:\WINDOWS\system32\cmd.  ×  +  ∨  
  
Maximum element: 10  
Press any key to continue . . . |
```

TIME COMPLEXITY : $O(n)$