EXERCISE-78 Exhaustive Search

PROGRAM

```
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

```
Maximum element: 10
```

TIME COMPLEXITY $O(n)$.