Program 81.Finding the maximum and minimum
Program:

```python
def find_max_min(lst):
    if not lst:
        return None, None  # Return None if the list is empty

    max_element = min_element = lst[0]

    for element in lst[1:]:
        if element > max_element:
            max_element = element
        if element < min_element:
            min_element = element

    return max_element, min_element
```

Output:

```
"C:\Program Files\Python312\python.exe" "C:\Work Space\DAA\DAA COADS.PYTHON\program 81.py"
Maximum: 9, Minimum: 1

Process finished with exit code 0
```

Time complexity:
O(n)