

1. 130. Write a program to perform the following

- An empty list
- A list with one element
- A list with all identical elements
- A list with negative numbers

**Test Cases:**

1. **Input:** []
  - **Expected Output:** []
2. **Input:** [1]
  - **Expected Output:** [1]
3. **Input:** [7, 7, 7, 7]
  - **Expected Output:** [7, 7, 7, 7]
4. **Input:** [-5, -1, -3, -2, -4]
  - **Expected Output:** [-5, -4, -3, -2, -1]

**Code:**

```
def sort_list(lst):  
    return sorted(lst)
```

```
test_cases = [  
    [],  
    [1],  
    [7, 7, 7, 7],  
    [-5, -1, -3, -2, -4]  
]
```

```
expected_outputs = [  
    [],  
    [1],  
    [7, 7, 7, 7],  
    [-5, -4, -3, -2, -1]  
]
```

```
for i, test_case in enumerate(test_cases):  
    output = sort_list(test_case)  
    expected = expected_outputs[i]  
    print(f"Input: {test_case}")  
    print(f"Expected Output: {expected}")  
    print(f"Actual Output: {output}")  
    print(f"Test {'Passed' if output == expected else 'Failed'}")  
    print()  
output:
```

Expected Output: [1]

Actual Output: [1]

Test Passed

Input: [7, 7, 7, 7]

Expected Output: [7, 7, 7, 7]

Actual Output: [7, 7, 7, 7]

Test Passed

Input: [-5, -1, -3, -2, -4]

Expected Output: [-5, -4, -3, -2, -1]

Actual Output: [-5, -4, -3, -2, -1]

Test Passed

Time complexity: $f(n)=O(n)$