Code Implementation:

Code using the provided implementation using selection sort

Testing and result:

Random numbers [64, 25, 12, 22, 11] => [11, 12, 22, 25, 64]

Already sorted list [1, 2, 3, 4, 5] => [1, 2, 3, 4, 5]

Reverse sorted list [5, 4, 3, 2, 1] => [1, 2, 3, 4, 5]

All elements the same [7, 7, 7, 7, 7] => [7, 7, 7, 7, 7]

Emply list [] => []

Single element [2] => [2]

Time & Space Complexity:

**Time Complexity:** O(n^2) due to nested loops.

**Space Complexity:** O(1) as it is sorting in it own array