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Algorithm 1 Pseudocode:

```
def in_place_selection_sort(U):
    <unsorted zone> = u
    <sorted zone> = empty
    <swap_counter> = 0
    while <unsorted zone> is not empty:
least_index = <index of smallest element in unsorted zone>
    <swap u[least_index] to the end of the unsorted zone>
    <remove the least element from the unsorted zone>
    <add the least element to the sorted zone>
    <swap_counter> = swap_counter + 1
    return <swap_counter>
```

Proving Efficiency for Pseudocode:

Best case Big O Efficiency == O(1)

Worst case Big O Efficiency == O(n^2)

Average case Big O Efficiency == O(n)