

72. Bubble Sort

Code:

```
def bubble_sort(arr):  
    n = len(arr)  
    swapped = True  
    while swapped:  
        swapped = False  
        for i in range(n-1):  
            if arr[i] > arr[i+1]:  
                arr[i], arr[i+1] = arr[i+1], arr[i]  
                swapped = True  
arr = [64, 25, 12, 22, 11]  
bubble_sort(arr)  
print("Sorted array:", arr)
```

Output:

```
Sorted array: [11, 12, 22, 25, 64]
```

Time Complexity:

- $T(n) = O(n^2)$