Bubble Sort

Bubble Sort is the simplest sorting algorithm that works by repeatedly swapping the adjacent elements if they are in the wrong order. This algorithm is not suitable for large data sets as its average and worst-case time complexity is quite high.

```python
def bubbleSort(array):
    if(len(array) == 0):
        return array
    else:
        counter = len(array)
        while(counter >= 0):
            pointerOne = 0
            pointerTwo = 1

            for i in range(len(array) -1):
                if(array[pointerOne] > array[pointerTwo]):
                    aux = array[pointerTwo]
                    array[pointerTwo] = array[pointerOne]
                    array[pointerOne] = aux

                pointerOne = pointerTwo
                pointerTwo += 1

            counter -= 1

    return array
```

Time complexity: O(n^2)

Basically, takes a pair of elements; here we compare the first and the second elements of the array, if the first one is bigger, we swap the elements, and move the pointers to the next positions and keep comparing till we check all the elements, through all the array.