```
BUBBLESORT(A)
1  for i = 1 to A.length-1
2    for j = A.length downto i+1
3      if A[j] < A[j-1]
4        exchange A[j] with A[j-1]
```

```
int bubble_sort(int A[])
{
        int i, j, temp;

        // for i = 1 to A.length-1
        for(i = 1; i <= length(A)-1; i++) {
                count++;   // count for i statement

                // for j = A.length downto i+1
                for (j = length(A); j >= i+1; j--) {
                        count++;   // count for j statement

                        // if A[j] < A[j-1]
                        if (A[j] < A[j-1]) {
                                count++;    // count if (true)
                                // exchange A[j] with A[j-1]
                                temp = A[j];
                                A[j] = A[j-1];
                                A[j-1] = temp;
                                count++;    // count swap
                        }
                        else {
                                count++;    // count if (false)
                        }
                }
                count++;     // count for j exit
        }
        count++;    // count for i exit

        return count;
}
```