```
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 \le length(A)-1; i++) {
                   count++;
                   // for j = A.length downto i+1 for (j = length(A); j >= i+1; j--) {
                             count++;
                             // \text{ if } A[j] < A[j-1]
                             if (A[j] < A[j-1]) {
                                       // exchange A[j] with A[j-1]
                                       temp = A[j];
                                       A[j] = A[j-1];
A[j-1] = temp;
                                       count++
                             }
                             count++;
                   }
                    count++;
         count++;
          return count;
}
```