```
int bubble sort(int A[])
BUBBLESORT(A)
   for i = 1 to A.length-1
                                                     int i, j, temp;
     for j = A.length downto i+1
        if A[j] < A[j-1]
                                                    // for i = 1 to A.length-1
          exchange A[j] with A[j-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[i] < A[i-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;
```