

INSERTION-SORT( $A, n$ )

1   **for**  $i = 2$  **to**  $n$

2        $key = A[i]$

3       *// Insert  $A[i]$  into the sorted subarray  $A[1 : i - 1]$ .*

4        $j = i - 1$

5       **while**  $j > 0$  and  $A[j] > key$

6            $A[j + 1] = A[j]$

7            $j = j - 1$

8        $A[j + 1] = key$