INSERTION-SORT(A)

1.   **for** j = 2 **to** A.length()

2.   key = A[j]

3.   i = j - 1

4.   **while** i > 0 and A[i] > key

5.   A[i+1] = A[i]

6.   i = i - 1

7.   A[i+1] = key