

```
1: procedure INSERTION-SORT( $A$ )
2:   for  $j = 2 \dots A.\text{length}$  do
3:      $k = A[j]$ 
4:      $i = j - 1$ 
5:     while  $i > 0$  and  $A[i] > k$  do
6:        $A[i + 1] = A[i]$ 
7:        $i = i - 1$ 
8:      $A[i + 1] = k$ 
```