



CLRS Problems

Author: Joseph Siu

Date: March 20, 2024



Algorithm 1 2.1-2, Decreasing Insertion Sort

```
INSERTION-SORT(A)
    for  $j \leftarrow 2$  to  $A.length$ 
        key  $\leftarrow A[j]$ 
         $i \leftarrow j - 1$ 
        while  $i > 0$  and  $key > A[i]$ 
             $A[i + 1] \leftarrow A[i]$ 
             $i \leftarrow i - 1$ 
         $A[i + 1] \leftarrow key$ 
```

Algorithm 2 2.1-3, Linear Search

```
function LINEAR-SEARCH( $A, v$ )
    for  $i \leftarrow 1$  to  $A.length$ 
        if  $A[i] = v$ 
            return  $i$ 
         $i \leftarrow i + 1$ 
    return NIL
```
