

# MAX-HEAPIFY( $A, i$ )

```
1   $l = \text{LEFT}(i)$ 
2   $r = \text{RIGHT}(i)$ 
3  if  $l \leq A.\text{heap-size}$  and  $A[l] > A[i]$ 
4       $largest = l$ 
5  else  $largest = i$ 
6  if  $r \leq A.\text{heap-size}$  and  $A[r] > A[largest]$ 
7       $largest = r$ 
8  if  $largest \neq i$ 
9      exchange  $A[i]$  with  $A[largest]$ 
10     MAX-HEAPIFY( $A, largest$ )
```