

Algorithm: BubbleDown

```
1 Procedure BubbleDown( $A, i, n$ )
2   largest  $\leftarrow i$ 
3   left  $\leftarrow 2 \cdot i + 1$ 
4   right  $\leftarrow 2 \cdot i + 2$ 
5   if  $left < n \wedge A[largest] < A[left]$  then
6     | swap largest and left
7   if  $right < n \wedge A[largest] < A[right]$  then
8     | swap largest and right
9   if  $i \neq largest$  then
10    | swap  $A[largest]$  and  $A[i]$ 
11    |  $A \leftarrow \text{BubbleDown}(A, largest, n)$ 
12  return  $A$ 
```