

Algorithm 1: Insert	
Input: Input	
Output: Output	
1	Procedure Insert(A, x)
2	$A[n] \leftarrow x$
3	$i \leftarrow n$
4	while $0 < i \wedge A[i] < A[\lfloor \frac{i-1}{2} \rfloor]$ do
5	swap $A[i]$ and $A[\text{floor}((i-1)/2)]$
6	$i \leftarrow \lfloor \frac{i-1}{2} \rfloor$
7	end
8	return A

Algorithm 2: f	
Input: Input	
Output: Output	
1	Procedure f(A)
2	print (Insert ($A, 2$))
3	return 1