

Algorithm: Remove

Input: A binary search tree t and an integer val

Output: t without a node of value val

```
1 Procedure Remove( $t, val$ )
2   if  $t = \text{Nil}$  then
3     return Nil
4   else if  $t_{value} < val$  then
5      $t_{right} \leftarrow \text{Remove}(t_{right}, val)$ 
6     return  $t$ 
7   else if  $t_{value} > val$  then
8      $t_{left} \leftarrow \text{Remove}(t_{left}, val)$ 
9     return  $t$ 
10  if  $t_{left} = \text{Nil}$  then
11    return  $t_{right}$ 
12  else if  $t_{right} = \text{Nil}$  then
13    return  $t_{left}$ 
14   $t' \leftarrow \text{FindMax}(t_{left})$ 
15   $t_{value} \leftarrow t'_{value}$ 
16   $t_{left} \leftarrow \text{Remove}(t_{left}, t_{value})$ 
17  return  $t$ 
```