

TREE-SUCCESSOR(x)

```
1  if  $x.right \neq \text{NIL}$ 
2      return TREE-MINIMUM( $x.right$ )  // leftmost node in right subtree
3  else // find the lowest ancestor of  $x$  whose left child is an ancestor of  $x$ 
4       $y = x.p$ 
5      while  $y \neq \text{NIL}$  and  $x == y.right$ 
6           $x = y$ 
7           $y = y.p$ 
8  return  $y$ 
```