

TREE-DELETE(T, z)

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1  if  $z.left == \text{NIL}$ 
2      TRANSPLANT( $T, z, z.right$ )           // replace  $z$  by its right child
3  elseif  $z.right == \text{NIL}$ 
4      TRANSPLANT( $T, z, z.left$ )           // replace  $z$  by its left child
5  else  $y = \text{TREE-MINIMUM}(z.right)$       //  $y$  is  $z$ 's successor
6      if  $y \neq z.right$                   // is  $y$  farther down the tree?
7          TRANSPLANT( $T, y, y.right$ )      // replace  $y$  by its right child
8           $y.right = z.right$               //  $z$ 's right child becomes
9           $y.right.p = y$                   //  $y$ 's right child
10     TRANSPLANT( $T, z, y$ )                // replace  $z$  by its successor  $y$ 
11      $y.left = z.left$                     // and give  $z$ 's left child to  $y$ ,
12      $y.left.p = y$                       // which had no left child
```