

OS-SELECT( $x, i$ )

1     $r = x.\text{left.size} + 1$     *// rank of  $x$  within the subtree rooted at  $x$*

2    **if**  $i == r$

3        **return**  $x$

4    **elseif**  $i < r$

5        **return** OS-SELECT( $x.\text{left}, i$ )

6    **else return** OS-SELECT( $x.\text{right}, i - r$ )