

# SIMPLER-RANDOMIZED-SELECT( $A, p, r, i$ )

```
1  if  $p == r$   
2      return  $A[p]$            //  $1 \leq i \leq r - p + 1$  means that  $i = 1$   
3   $q = \text{RANDOMIZED-PARTITION}(A, p, r)$   
4   $k = q - p + 1$   
5  if  $i \leq k$   
6      return  $\text{SIMPLER-RANDOMIZED-SELECT}(A, p, q, i)$   
7  else return  $\text{SIMPLER-RANDOMIZED-SELECT}(A, q + 1, r, i - k)$ 
```