

Set $C[i]$ be the number of elements equal i .

for $i \leftarrow 1$ **to** k

do $C[i] \leftarrow 0$

for $j \leftarrow 1$ **to** n

do $C[A[j]] \leftarrow C[A[j]] + 1$

▷ $C[i] = |\{\text{key} = i\}|$

Set $C[i]$ be the number of elements smaller than or equal i .

for $i \leftarrow 2$ **to** k

do $C[i] \leftarrow C[i] + C[i-1]$

▷ $C[i] = |\{\text{key} \leq i\}|$

Move elements equal i to $B[C[i-1]+1..C[i]]$.

for $j \leftarrow n$ **downto** 1

do $B[C[A[j]]] \leftarrow A[j]$

$C[A[j]] \leftarrow C[A[j]] - 1$