Counting Sort

```
for i = 0 to k-1 do C[i] ← 0
for j = 1 to n do C[A[j]] ← C[A[j]] + 1
t ← 0
for i = 0 to k-1 do
    for j = 1 to C[i] do
        t ← t + 1
        B[t] ← i
    end for
end for
```

```
for i = 0 to k-1 do C[i] ← 0
for j = 1 to n do C[A[j]] ← C[A[j]] + 1
for i = 1 to k-1 do C[i] ← C[i-1] + C[i]
for j = n downto 1 do
    B[C[A[j]]] ← A[j]
    C[A[j]] ← C[A[j]] - 1
end for
```