Algorithm 1: BucketSort
Input: Input
Output: Output
1 Procedure BucketSort(A, N)
2   B := Array of N empty lists
3   **for** $i \leftarrow 0$ **to** $n-1$ **do**
4   associate k with A[i]
5   append A[i] to B[k]
6   **end**
7   j $\leftarrow 0$
8   **for** $k \leftarrow 0$ **to** $N-1$ **do**
9   **for** $x \in$ B[k] **do**
10   A[j] $\leftarrow x$
11   j $\leftarrow j+1$
12   **end**
13   **end**
14   **return** A