Algorithm: BucketSort

Input: Input
Output: Output

```
1  Procedure BucketSort(A)
2  |   B ← Array of N empty lists
3  |   for i ← 0 to n − 1 do
4  |   |   associate k with A[i]
5  |   |   append A[i] to B[k]
6  |   end
7  |
8  |   for i ← 0 to N' − 1 do
9  |   |   B[i] ← InsertionSort(B[i])
10 |   end
11 |
12 |   j ← 0
13 |   for k ← 0 to N − 1 do
14 |   |   for x ∈ B[k] do
15 |   |   |   A[j] ← x
16 |   |   |   j ← j + 1
17 |   |   end
18 |   end
19 |   return A
```