BUCKET-SORT(A, n)

1 let $B[0:n-1]$ be a new array
2 **for** $i = 0$ **to** $n - 1$
3   make $B[i]$ an empty list
4 **for** $i = 1$ **to** n
5   insert $A[i]$ into list $B[\lfloor n \cdot A[i] \rfloor]$
6 **for** $i = 0$ **to** $n - 1$
7   sort list $B[i]$ with insertion sort
8 concatenate the lists $B[0], B[1], \ldots, B[n-1]$ together in order
9 **return** the concatenated lists