BUCKET-SORT(A, n)

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