BUCKET SORT ALGORITHM

1. Declare Array A with default values
2. Set n = length of Array A
3. Create bucket of size n:
    a. Set bucket = empty array
    b. Set i = 0
    c. While (i < n)
        i. Set bucket[i] = empty array
        ii. i = i + 1
4. Inserting elements into their respective buckets:
    a. Set j = 0
    b. While (j < n)
        i. Set bucket_ind = floor value of A[j]*n
        ii. Bucket[bucket_ind] = A[j]
        iii. j = j + 1
5. Sort the elements of each bucket:
    a. i = 0
    b. While (i < n)
        i. sort the bucket[i] using any sorting algorithm
        ii. i = i + 1
6. Get the Sorted buckets
    a. Set i = 0, j = 0, k = 0
    b. While (i < n)
        i. While (j < length of bucket[i])
            1. A[k] = bucket[i][j]
            2. k = k + 1
7. Print Array A
8. Exit