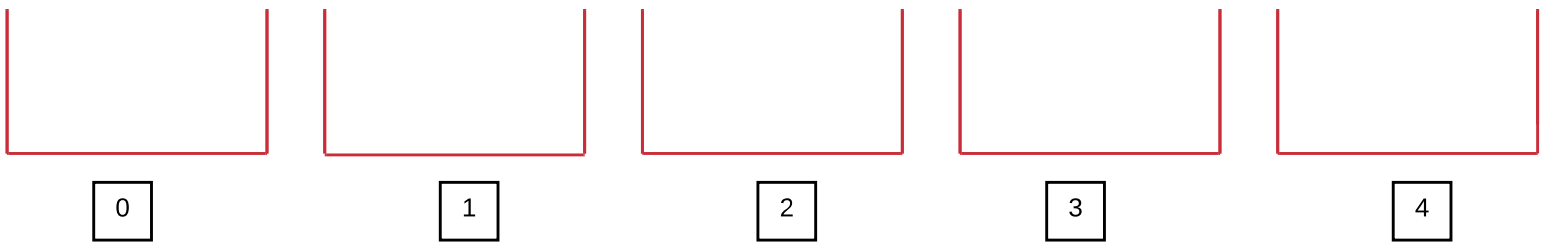
Bucket Sort

2	8	3	1	5

Length = 5
Max = 8
size = Max/Length = 1.6

Make empty buckets equal to Length from 0 to 4



Iterate through array

Divide array[i] by size and round down the result to nearest integer

put array[i] in that bucket

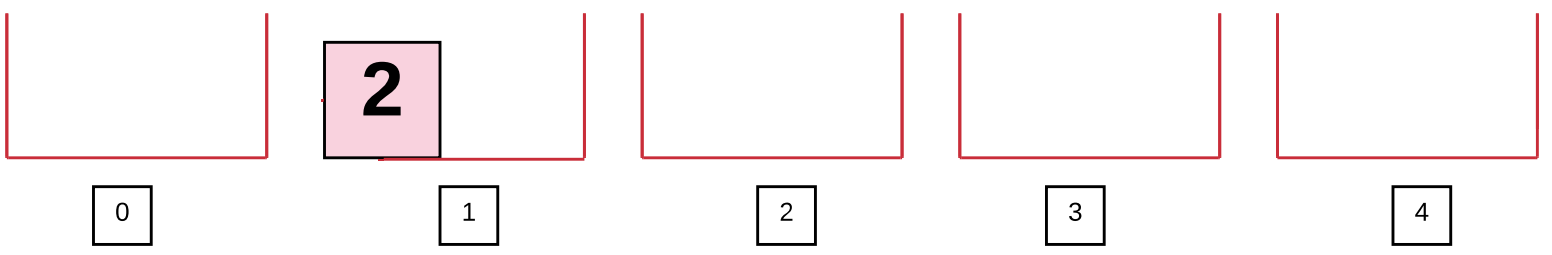
If the result = length, then place in the last bucket

2	8	3	1	5

size = **1.6**

2/1.6 = Box[1]

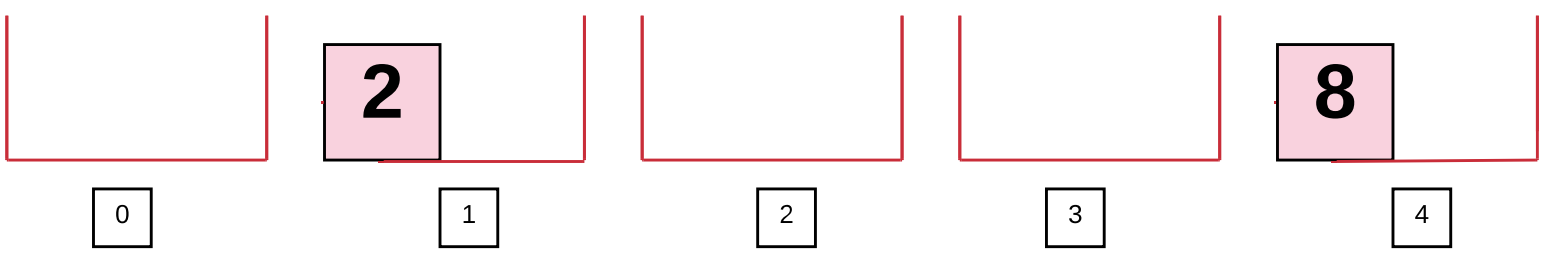
8	3	1	5



8/1.6 = 5

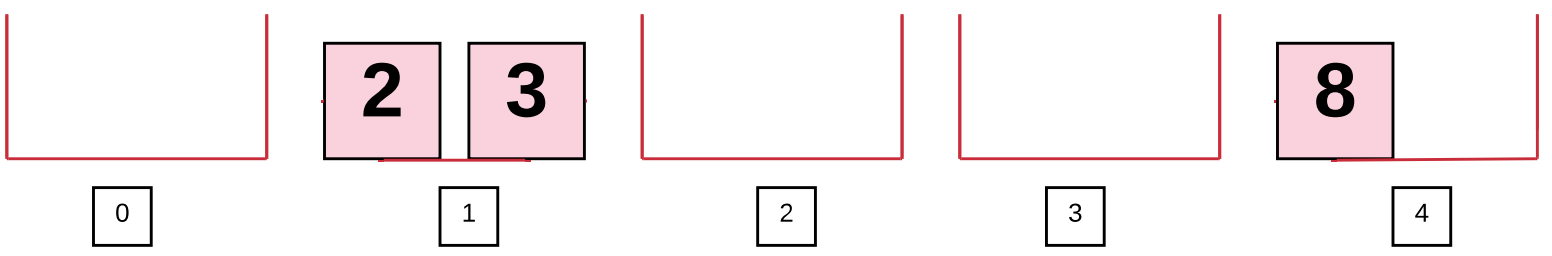
Result = length so item is placed in the last bucket[4]

3	1	5



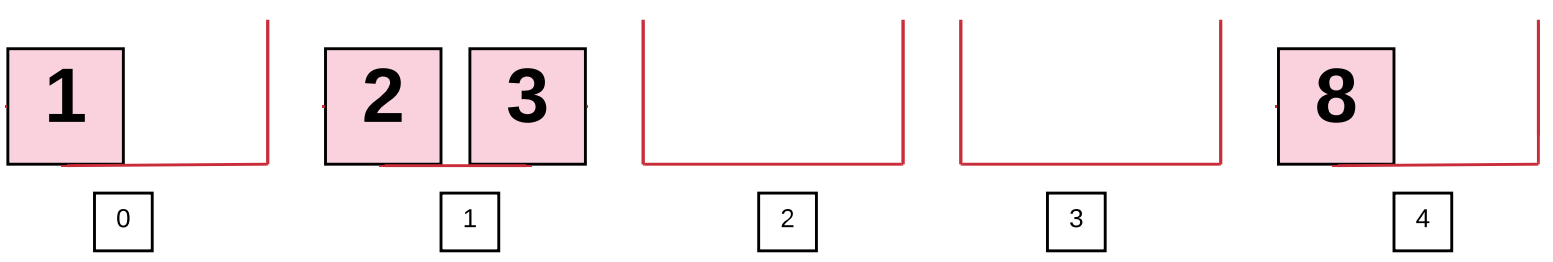
3/1.6 = Box[1]

1	5

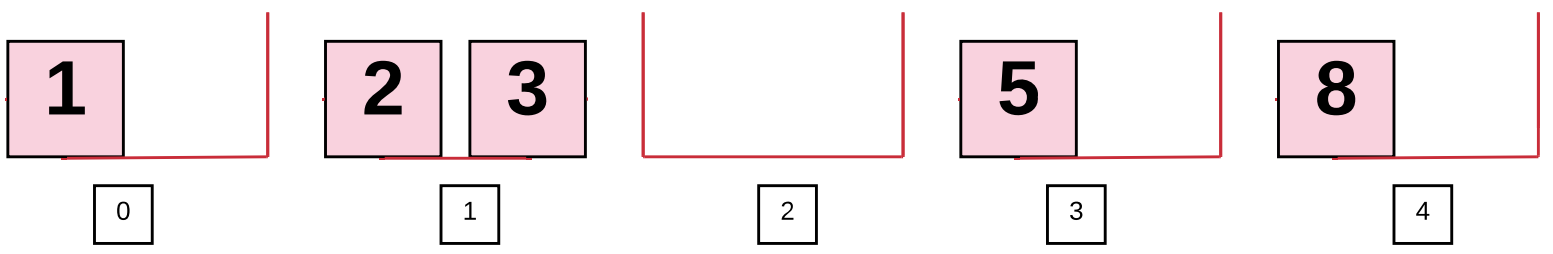


1/1.6 = Box[0]

5



5/1.6 = Box[3]



Once each bucket is filled as above, you would then perform another algorithm to sort each bucket eg. Insertion Sort or Selection Sort

Finally the buckets are joined together to form the final sorted array