**Approach 1: Brute Force**

1. Use nested loops to pick and element and iterate over array to find number of elements lesser than it

Time -> O(n^2)

Space -> O(n)

**Approach 2: BST**

Use of sorted list for implementation of BST

1. Start from last
2. For each number, find how many numbers less than it exist, by searching left half of the bst after num itself
3. Add this num to BST
4. Do this until all elements traversed
5. Return res[::-1]

CODE:

def countSmaller(self, nums: List[int]) -> List[int]:

slist = SortedList()

res = []

for num in nums[::-1]:

count = SortedList.bisect\_left(slist,num)

res.append(count)

slist.add(num)

return res[::-1]