

**A) Use the aggregate method**

Assuming the initial space is 1, after filling it up, the space should double to 2, then to 4 and so on. Each time the resizing happens, it takes  $O(n)$  for it to create a new array when double the space and insert back the elements. The insertions themselves do  $O(1)$ , but every resize takes  $O(n)$ . So the aggregate method should take  $O(n)$  runtime.

**B) Use the accounting method**

Assuming the cost of inserting should be 1 for each element to insert when resizing happens. The total insertions should be  $n$  which would cost  $O(n)$  for all the insertions that happen for all elements. So the accounting method should take  $O(n)$  runtime as well.