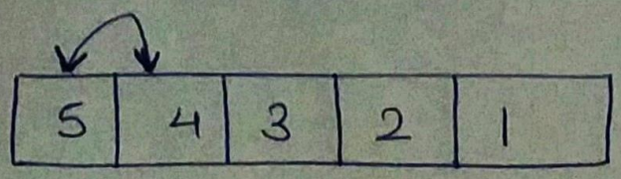
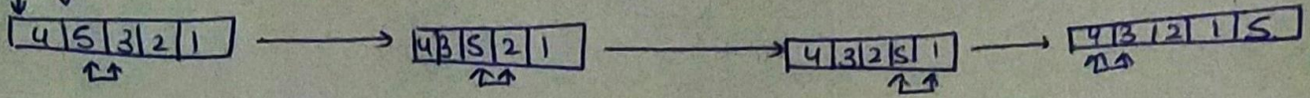
we will explain this by taking an example.
let's take worst case.

5, 4, 3, 2, 1

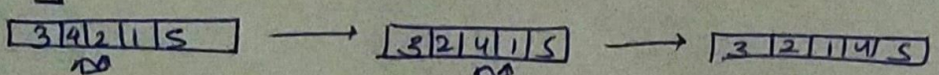
Now we have to arrange in ascending order



Here we first swap.

1st One 

In our first procedure largest no. reaches the right hand side

2nd one 

In 2nd procedure 2nd largest no reaches its position

We can see that the
no. of authematic operation performed.
[assuming each ~~and~~ step requires a unit time]

$$= n + (n-1) + (n-2) \_ \_ \quad 1$$

$$= \frac{n(n+1)}{2} = \frac{n^2}{2} + \frac{n}{2}$$

The big O of bubble sort is n^2

$$\boxed{O(n^2)}$$