

Bubble Sort

| | | | | |
|---|---|---|---|---|
| 2 | 3 | 1 | 5 | 4 |
|---|---|---|---|---|

The visualization of the bubble sort of the above array is given below.

At first the loop will check the first and second ~~index~~ index. If the first number is greater than the second number then it will swap. If it's not it won't swap. In this case,

$1^{st} < 2^{nd}$, so, it won't swap.

| | | | | |
|---|---|---|---|---|
| 2 | 3 | 1 | 5 | 4 |
|---|---|---|---|---|

then, $2^{nd} > 3^{rd}$, it will swap

| | | | | |
|---|---|---|---|---|
| 2 | 1 | 3 | 5 | 4 |
|---|---|---|---|---|

It will again check from the 1st index, again, $1^{st} > 2^{nd}$, so it will swap

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 5 | 4 |
|---|---|---|---|---|

Next the loop will check again the 4th and 5th index. We can see that the 4th index is greater than the 5th index numbers, so it will swap again.

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|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

It is the final result of the given array. by using bubble sort.