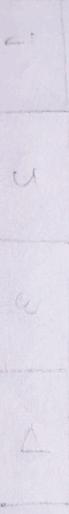


## Bubble Sort

Bubble sort is a simple sorting algorithm which repeatedly steps through the list to be sorted, compares adjacent elements and swaps them if they are in the wrong order.

1	2	3	4	5	6	7	8	9	10
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The visualization of the bubble sort of the above array is given below:



At first the loop will check the 1st and 2nd index. If the 1st number is greater than the 2nd number then it will swap. If its not then it won't swap. In this case,  $1 < 2$ , so it won't swap.

2	3	1	5	4
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Then,  $2 > 3$  so it will swap.

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

It will again check the 1st index, so,  $1 > 2$ , it will swap

1	2	3	5	4
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The loop will again check the 4th and 5th index. we can see that the 4th index number is greater than the 5th index number so it will swap again.

1	2	3	4	5
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It is the final result of the given array by using bubble sort

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

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