**Bubble Sort** is the simplest [sorting algorithm](https://www.geeksforgeeks.org/sorting-algorithms/) that works by repeatedly swapping the adjacent elements if they are in the wrong order. This algorithm is not suitable for large data sets as its average and worst-case time complexity is quite high.

***Input:****arr[] = {6, 3, 0, 5}*

***First Pass:***

* *Bubble sort starts with very first two elements, comparing them to check which one is greater.*
  + *( 6 3 0 5 ) –> (****3 6****0 5 ), Here, algorithm compares the first two elements, and swaps since 6 > 3.*
  + *( 3****6******0****5 ) –>  ( 3****0******6****5 ), Swap since 6 > 0*
  + *( 3**0****6******5****) –>  ( 3**0****5 6****), Swap since 6 > 5*

***Second Pass:***

* *Now, during second iteration it should look like this:*
  + *(****3 0****5 6 ) –>  (****0 3****5 6 ), Swap since 3 > 0*
  + *( 0****3 5****6 ) –>  ( 0****3 5****6 ), No change as 5 > 3*

***Third Pass:***

* *Now, the array is already sorted, but our algorithm does not know if it is completed.*
* *The algorithm needs one****whole****pass without****any****swap to know it is sorted.*
  + *(****0 3****5 6 ) –>  (****0 3****5 6 ), No change as 3 > 0*

*Array is now sorted and no more pass will happen.*