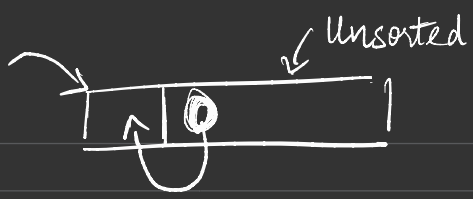
INSERTION SORT $O(n^2)$



NOTE - Take element from unsorted and keep putting in sorted part

S - Sorted
US - Unsorted

LOOP 1 - S 7 | 8 3 1 2 US // compare which is Bigger

7, 8 3 1 2

LOOP 2 - S 7, 8 | 3 1 2 US // 3 comp to 8 bigger? No!
// 3 comp to 7 bigger? No!

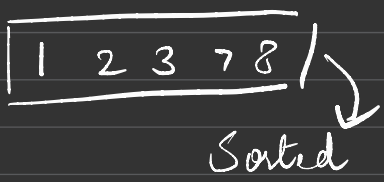
3, 7, 8 1 2

LOOP 3 - S 3, 7, 8 | 1 2 US // 1 comp 8 Big? No
// 1 comp 7 Big? No
// 1 comp 3 Big? No

1, 3, 7, 8 2

LOOP 4 - S 1, 3, 7, 8 | 2 US // 2 comp 8
2 comp 7
2 comp 3
2 comp 1 Big? Yes,
Then 1 will stay at it's position and 2 will be placed at the 2nd place.

1, 2, 3, 7, 8



https://bitbucket.org/arvind_menon/java-practice/src/bd45ce9eaa1caa15b6b656a10193fbf3a62ccc4a/Sorting.java?at=master