

* Sorting Algorithm

- bubble
- selection
- insertion

* built-in JS sort method

arr.sort((n1, n2) => {
 // call back func
 return n1 - n2;
})

$n1 - n2 > 0 \rightarrow n2, n1$ 내림차순
 $n1 - n2 < 0 \rightarrow n1, n2$ 오름차순

* Bubble sort $O(N^2)$

→ largest value pops to top. → 비교해야 큰 값들이 뒤에 쌓임.

ex) [5, 3, 4, 1, 2] → function swap(arr, idx1, idx2) {
 [3, 5, 4, 1, 2]
 [3, 4, 5, 1, 2]
 [3, 4, 1, 5, 2]
 [3, 4, 1, 2, 5] sorted
 var temp = arr[idx1];
 arr[idx1] = arr[idx2];
 arr[idx2] = temp;
}

* In nearly sorted $O(N)$

```
let noSwap = true  
:  
if(noSwap) break;
```