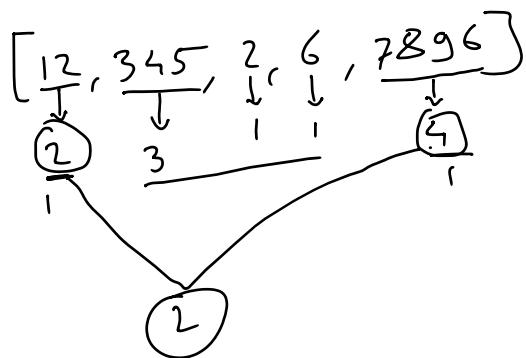


$\left[ \underline{8}, \underline{1}, \underline{2}, \underline{2}, \underline{3} \right]$



8 2 3

$\left[ \begin{array}{l} \text{if } (i \neq j \text{ and } \text{nums}[j] < \text{nums}[i]) \\ \quad \text{count}++ \end{array} \right]$



— X — X —

Sorting algorithm  
 ↳ ascending order  $\rightarrow$  small  $\rightarrow$  large  
 ↳ descending order  $\rightarrow$  large  $\rightarrow$  small

$\left[ \underline{5A}, 3, 2, \underline{5B} \right]$

$[2, 3, \underline{5A}, \underline{5B}] \rightarrow \text{stable}$

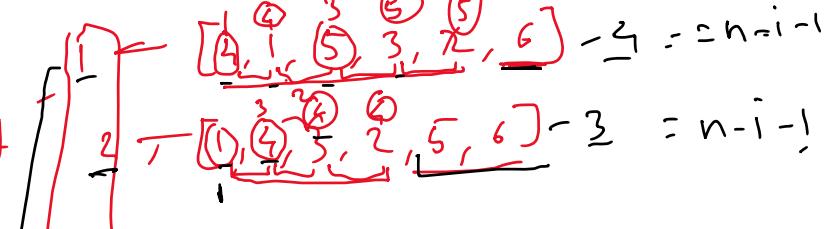
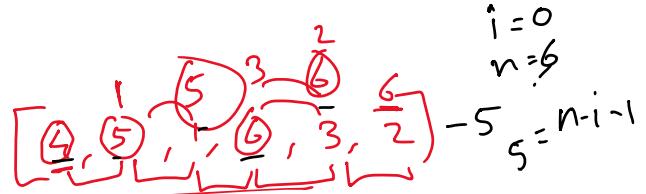
$[2, 3, \underline{5B}, \underline{5A}] \rightarrow \text{unstable}$

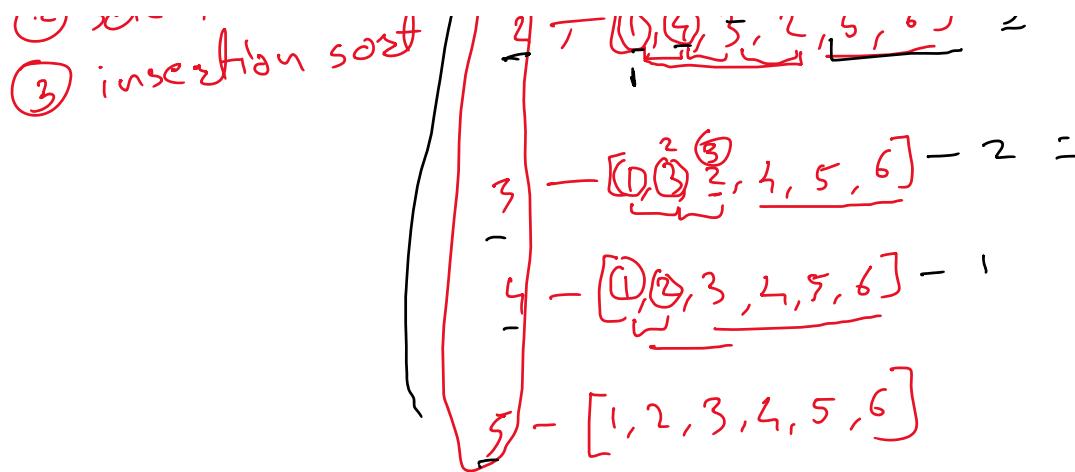
Sorting algorithm

① bubble sort

② selection sort

③ insertion sort

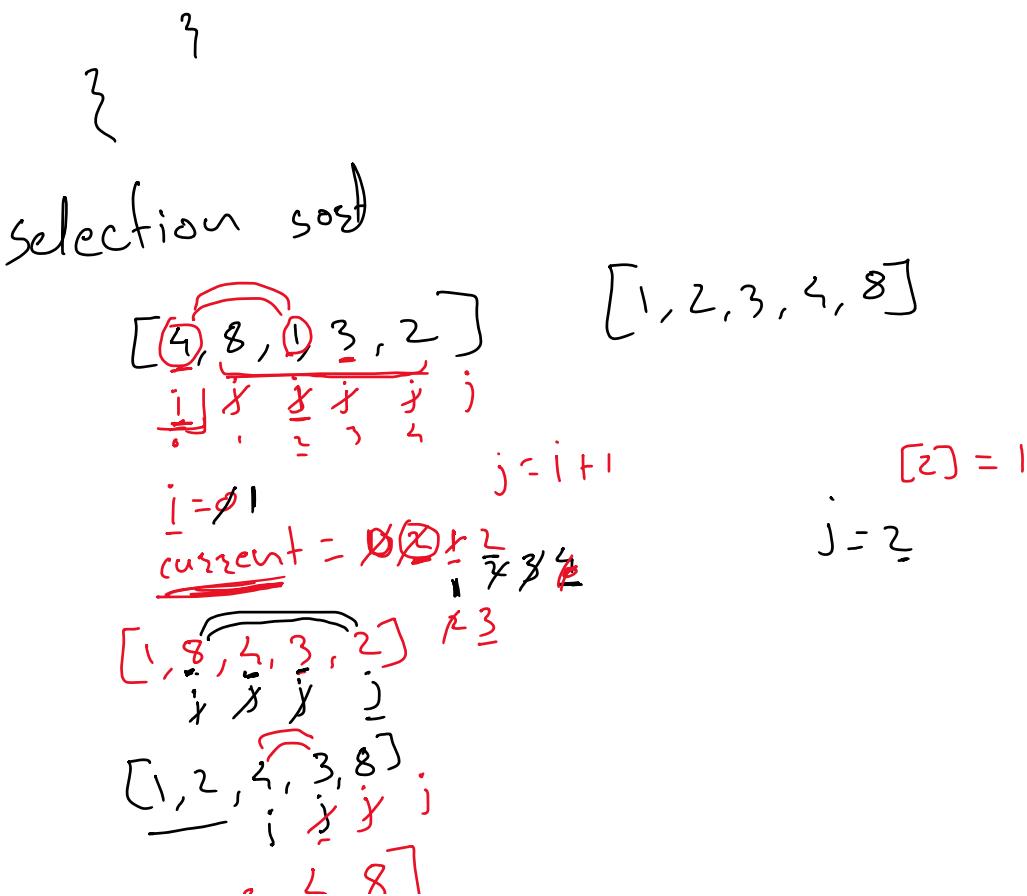




```

for(int i=0; i<n-1; i++) {
    for(int j=0; j<n-i-1; j++) {
        if(arr[j] > arr[j+1]) {
            temp = arr[j]
            arr[j] = arr[j+1]
            arr[j+1] = temp
        }
    }
}

```



~~1 2 3 4 5~~  
[1, 2, 3, 4, 5]

[5, 4, 2, 8, 3]