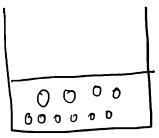
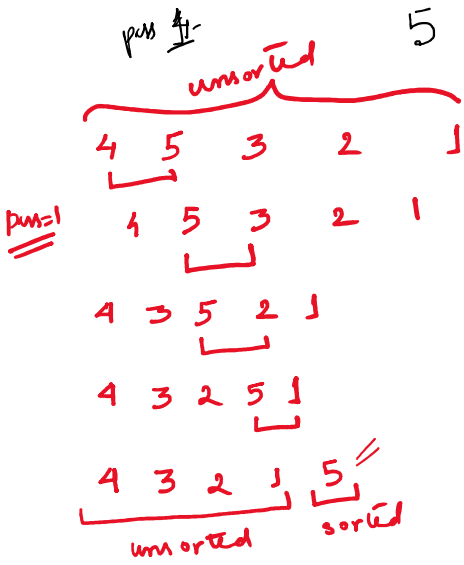
13 January 2025 12:05

Bubble Sort.

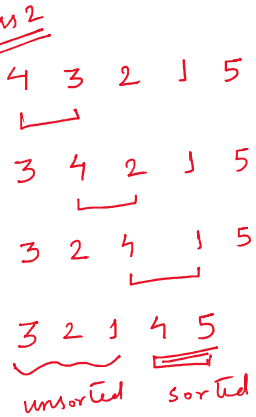


4 (5) 3 2 1 → swapping of adjacent elements.

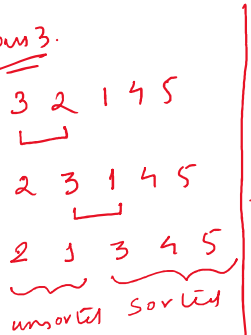
pass 1:



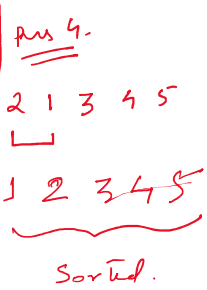
pass 2



pass 3.



pass 4.



Loop ??

1st loop → Pass → 1 to N−1

2nd loop → Compare & swapping.

→ j = 0 to (n−1−pass)

4 5 3 2 1

pass 1,

4 5 3 2 1

arr(0) < arr(1) →

arr(1) > arr(2) → 4 3 5 2 1

arr(2) > arr(3) → 4 3 2 5 1

arr(3) > arr(4) → 4 3 2 1 5

pass 2:

4 3 2 1 5

arr(0) > arr(1) → 3 4 2 1 5

arr(1) > arr(2) → 3 2 4 1 5

arr(2) > arr(3) → 3 2 1 4 5

pass	i	pass + i
1	3	4 = n−1
2	2	4

pass + i = n−1

i = (n−1−pass)

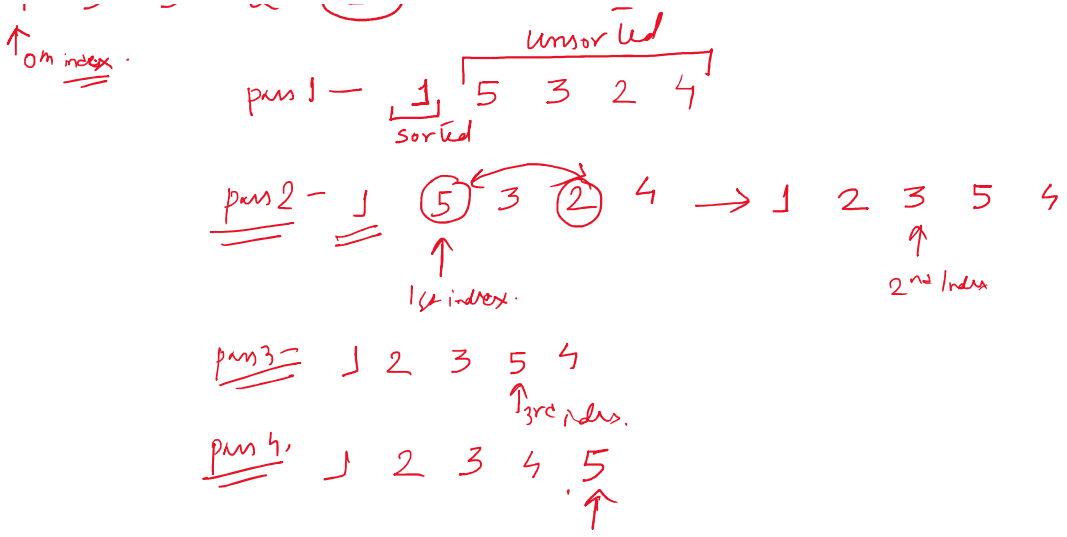
Selection sort — 4 5 3 2 1

Minimum index find karo and swap karo.

4 5 3 2 (1)

↑ 0th index.

pass 1 — 1. unsorted: 5 3 2 4



4 5 3 2 1

pass 1 → Start from 0th index → 1 5 3 2 4

pass 2 - Start from 1st index → 1 2 3 5 4

pass 3 - start from 2nd index → 1 2 3 5 4

pass 4 start from 3rd index → 1 2 3 4 5