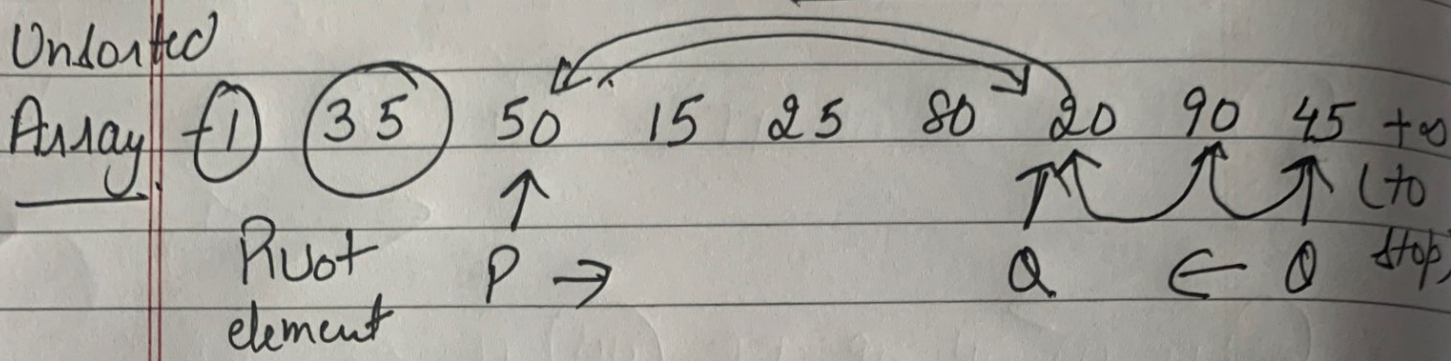
CH-6.

Quick sort → Divide & Conquer (DAC) algorithm.

Partition (combine)



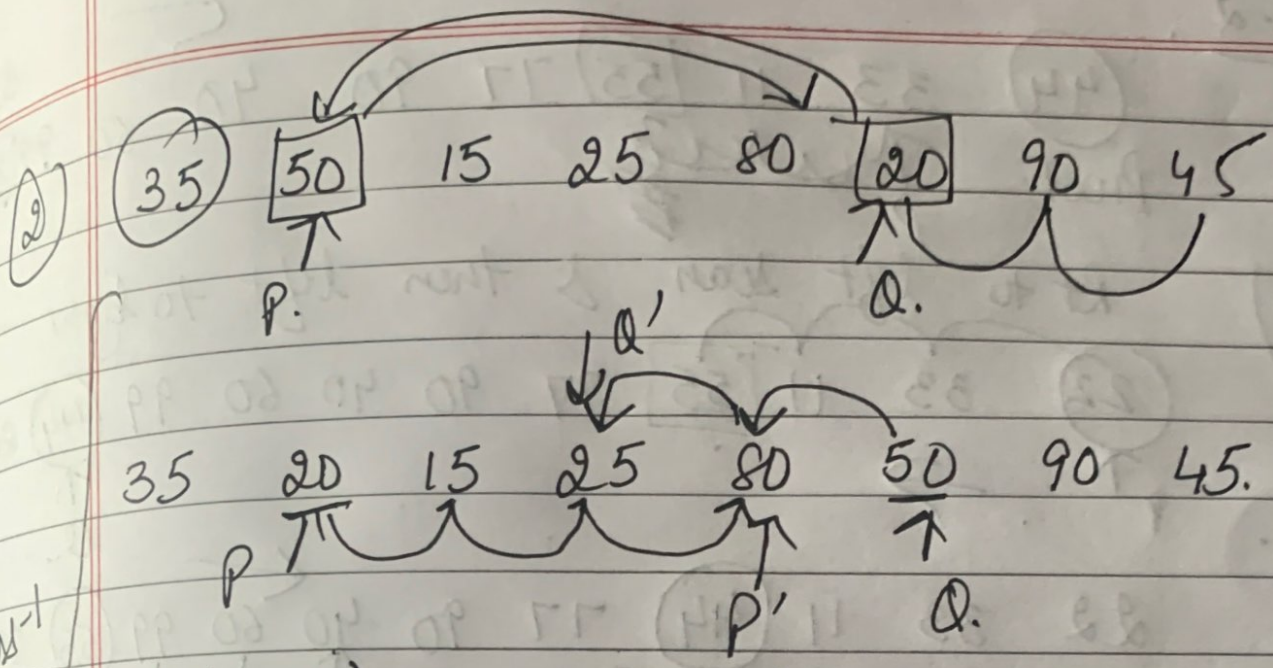
1) P will stop if it find element greater than Pivot element (>=)

2) Q will stop if it find element equal or leaser than Pivot element (<=)

3) P scans from left to Rt
Q " " Rt to left

4) If P & Q does not cross each other then exchange them.

5) If P' & Q' cross each other or at the same position then replace. Q with pivot element.



Pass-1

P' & Q' cross each other. or at same Position then replace Q with Root element

25 20 15 35 80 50 90 45

All less — At the sorted Position. — All greater.

Root1: 25 20 15 +∞ | Root2: 80 50 90 45 → +∞

15 20 25. 35 | 80 50 45 90. +∞

∴ sorted. | sorted.

Final sorted array.

45 50 80 90

Scanned with CamScanner