

## Pattern-6 (Move/Rearrangement Pattern)

A pattern where elements are repositioned inside the array based on a condition, usually without changing the relative order (Stable rearrangement)

↳ When to use-

Use this problem when the problem involves-

- Moving certain elements to front/end
- Rearranging based on condition (zero, negative, even/odd)
- Doing it in place
- Preserving Order (V.V. Imp.)

↳ Core Idea

Use a slow pointer to track the correct pos.  
Use a fast pointer to scan the array.

↳ Time Complexity -  $O(n)$

Space Complexity -  $O(1)$

→ Interview/Single word Move all. Rearrange, Segregate  
push to end/bring to front, maintain

order ↳ THINK MOVE/REARRANGEMENT Pattern

↳ One Line Interview Answer.

"We use a two pointer rearrangement technique to move elements in place while preserving order".

↳ Question on the skillians sheet on Day 14