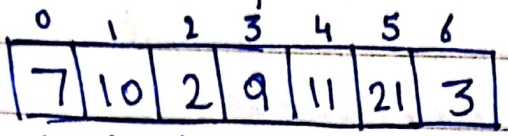
Linear vs Binary Search:

Date

→ Linear Search:

→ Searches for an element by visiting all the elements sequentially ~~test~~ until the element is found.



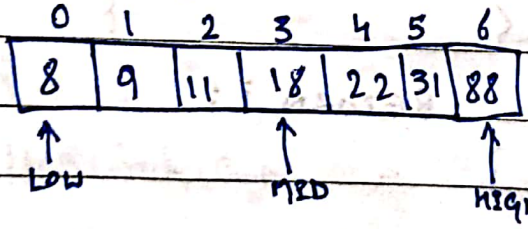
=> Can be sorted / unsorted.

Search '2' → Element found.

Worst complexity : O(n).

→ Binary Search:

→ Searches for an element by breaking the search space into halves in a sorted array.



Search '18'

Worst complexity : O(log n).

→ The search continues towards either side of mid based on whether the element to be searched is lesser or greater than mid.

LINEAR SEARCH	BINARY SEARCH
→ Works on both sorted & unsorted arrays.	→ Works only on sorted arrays.

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→ Equality operations.	→ Inequality operations.
→ O(n) WC complexity.	O(log n) WC complexity