

Linear Search

Linear Search

- In linear search, the idea of the algorithm is to iterate across the array from left to right, searching for a specified element.

In pseudocode:

- Repeat, starting at the first element:
 - If the first element is what you're looking for (the target), stop.
 - Otherwise, move to the next element.

Linear Search

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|--------|
| 9 |

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- **Worst-case scenario:** We have to look through the entire array of n elements, either because the target element is the last element of the array or doesn't exist in the array at all.
- **Best-case scenario:** The target element is the first element of the array, and so we can stop looking immediately after we start.

Linear Search

$$O(n)$$

$$\Omega(1)$$