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## Unsorted Arrays vs Binary Search

Choose

difficulty:



Beginner



Intermediate



Advanced

1. How is a linear search performed?

☐ a: An element is copied linearly in another array until the required element comes up.

[Explanation](#)

☐ b: Array is broken into smaller subarrays and elements are searched recursively.

[Explanation](#)

☒ c: Array is traversed from left to right using a loop, until the required element comes up.

☐ d: None of the above

2. In the worst case, what is the time complexity of linear search?

☐ a:  $O(\log N)$

☐ b:  $O(1)$

☒ c:  $O(N)$  [Explanation](#)

☐ d:  $O(N \log N)$

3. In the best case, what is the time complexity of linear search?

☒ a:  $O(1)$  [Explanation](#)

☐ b:  $O(N \log N)$

☐ c:  $O(\log N)$

☐ d:  $O(N)$

4. How is linear search disadvantageous?

☒ a: Time taken to find an element is more as compared to other searching algorithms

[Explanation](#)

☐ b: Space complexity to perform a linear search increases the memory overhead

[Explanation](#)

☐ c: It is difficult to implement linear search. [Explanation](#)

☐ d: None of the above

5. For an ordered linear search,  $O(\log n)$  is the worst case time complexity.

(An ordered linear search is the linear search on an array which is already sorted)

☐ a: True

☒ b: False [Explanation](#)

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5 out of 5

