

Feature	Linear Search	Binary Search
Time Complexity	$O(n)$	$O(\log n)$
Best Case Time Complexity	$O(1)$	$O(1)$
Worst Case Time Complexity	$O(n)$	$O(\log n)$
Space Complexity	$O(1)$	$O(1)$ (Iterative) or $O(\log n)$ (Recursive)
Data Requirement	Works on unsorted and sorted lists	Requires sorted list
Implementation Complexity	Simple and easy to implement	More complex to implement
Use Case	Small or unsorted datasets	Large, sorted datasets
Performance on Large Data	Inefficient	Highly efficient
Applicability	Can be used on any list	Only on sorted lists
Pre-processing Required	None	Sorting the data before searching