**Linear Search:** Linear search involves checking each element in a list one by one until the desired element is found or the list ends. It does not require the data to be sorted.

**Binary Search:** Binary search is an efficient algorithm for finding an element in a sorted list. It works by repeatedly dividing the search interval in half. If the middle element is equal to the search key, the search is successful. Otherwise, the search continues in the left or right half, depending on whether the search key is less than or greater than the middle element.

1. **Time Complexity:**

* **Linear Search:** O(n)
* **Binary Search:** O(logn)

1. **When to Use Each Algorithm:**

* **Linear Search:** Suitable for small datasets or unsorted data. It's simple to implement and doesn't require additional conditions like sorting. It can be used on any list, sorted or unsorted.
* **Binary Search:** Best suited for large, sorted datasets. The efficiency gained with larger datasets can be substantial, making it a preferred choice when data is sorted. Significantly faster than linear search for large datasets due to its logarithmic time complexity.