## 1. LINEAR SEARCH ALGORITHM

**STEP 1.** First, read the search element in the array.
**STEP 2.** Set an integer i = 0 and repeat steps 3 to 4 till i reaches the end of the array.
**STEP 3.** Match the key with arr[i].
**STEP 4.** If the key matches, return the index. Otherwise, increment i by 1

## 2. BINARY SEARCH ALGORITHM

**STEP 1.** Set the low index to the first element of the array and the high index to the last element.
**STEP 2.** Set the middle index to the average of the low and high indices.

- If the element at the middle index is the target element, return the middle index.
- Otherwise, based on the value of the key to be found and the value of the middle element, decide the next search space.
- If the target is less than the element at the middle index, set the high index to middle index – 1.
- If the target is greater than the element at the middle index,set the low index to middle index + 1.

**STEP 3.** Perform step 2 repeatedly until the target element is found or the search space is exhausted.