Linear Search

Linear search is a **sequential searching algorithm where we start from one end and check every element of the list until the desired element is found**. It is the simplest searching algorithm.
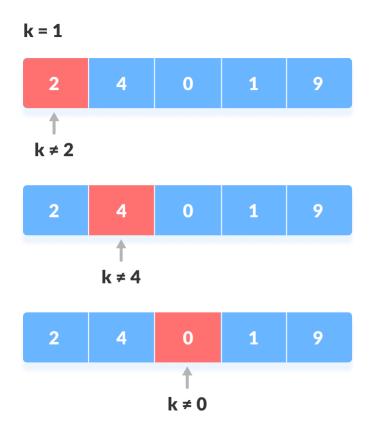

How Linear Search Works?

The following steps are followed to search for an element k = 1 in the list below.

2	4	0	1	9

Array to be searched for

1. Start from the first element, compare k with each element x.

k = 1

k ≠ 2

k ≠ 4

k ≠ 0

Compare with each element
2. If $x == k$, return the index.

k = 1

Element found

3. Else, return not found.

Linear Search Algorithm

```
LinearSearch(array, key)
 for each item in the array
  if item == value
   return its index
```