

## Data Structure and Algorithms Linear Search

Linear search is a very simple search algorithm. In this type of search, a sequential search is made over all items one by one. Every item is checked and if a match is found then that particular item is returned, otherwise the search continues till the end of the data collection.

### Linear Search



### Algorithm

Linear Search ( Array A, Value x)

```
Step 1: Set i to 1
Step 2: if i > n then go to step 7
Step 3: if A[i] = x then go to step 6
Step 4: Set i to i + 1
Step 5: Go to Step 2
Step 6: Print Element x Found at index i and go to step 8
Step 7: Print element not found
Step 8: Exit
```

### Pseudocode

```
procedure linear_search (list, value)

  for each item in the list
    if match item == value
      return the item's location
    end if
  end for

end procedure
```

To know about linear search implementation in C programming language, please click-[here](#) .