

Searching

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Searching :- Searching is a process of searching an element in a list. If that element is found then it reports yes, otherwise reports no.

1. Linear Search
2. Binary Search

1. Linear Search :-

Linear search is also known as sequential search because searching is done sequentially from the first element onwards. This search is suitable for sorted as well as unsorted list.

Advantage - It works on sorted as well as unsorted list.

Disadvantage - Since it works it takes longer time in search.

Ques. Write an algorithm to search a given number in a list of n numbers.

:- Suppose there is an array of n elements

steps 0. Input n

1. $i = 0$

2. while $i < n$ repeat steps

3 to 4



3. Input $a(i)$
4. $i = i + 1$
5. Input search-number
6. $flag = 0$
7. $i = 0$
8. While $i < n$ repeat steps
9 to 10
9. If $a[i] = \text{search-number}$
then
 $flag = 1$
10. $i = i + 1$
11. If $flag = 0$
then print "Not found"
else
print "found"
12. END

