Data Structures and Algorithm
Chapter - 7.1

Linear Search

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Contents

Search in Data Structure

Search is a method by which a particular data item can be found from an array, a stack, or a queue. There are many kinds of search algorithms.

1. Linear Search
2. Binary Search
3. Interpolation Search
4. Hash Table

Linear Search

Linear Search is defined as a sequential search algorithm that starts at one end and goes through each element of a list until the desired element is found, otherwise the search continues till the end of the data set. It is the easiest searching algorithm.

Find 20

10	30	40	60	70	50	55	20	25	90
0	1	2	3	4	5	6	7	8	9
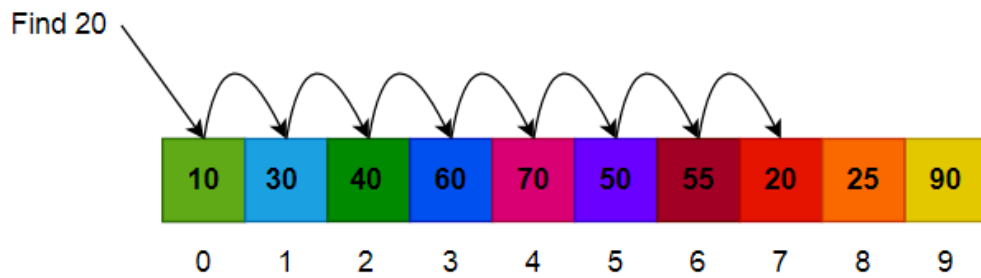
Linear Search

Algorithm of Linear Search

Linear Search (Array A, Value x)

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