Abstract

Searching is an algorithm that search a particular element in a given list of elements. Sorting Technique is frequently used in a large variety of important applications to search a particular element. Several Searching Algorithms of different time and space complexity are exist and used. This paper provides a novel searching algorithm Ternary search which is based on dividing the given elements into three parts. We also compare the Ternary search algorithm with Linear Search and Binary Search. MATLAB is used for implementation and Analysis of CPU time taken for all the three searching algorithms used. Linear search can be used with any random array but for binary search and ternary search sorted array is required. Result shows that ternary search algorithm requires less time for search any particular element.

References


Index Terms

Computer Science
Algorithms

Keywords

Binary Search, Linear Search, Algorithm, Data Structures