



# C++

## Programming Step-by-Step

Asadullah Shah



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# **C++ PROGRAMMING: STEP BY STEP**

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**Editors**

Asadullah Shah



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# 25. BINARY SEARCH

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## Abstract

The binary search method is called because it breaks the total list in two halves. Then search for first half and look for the data item. If item not found, break the second half in two halves and so on so forth. This process of searching is faster than linear search.

## 25.1 Binary Search

Linear lookup is very slow that might not be noticeable when list is small. However, when the list grows it becomes so much slow. In a sorted telephone directory number list one can go to the half of the directory list and compare the name there one you are looking for. You can go the middle of the remaining pages, and repeat the process. The program in Figure 24.1 is used for binary search methods.