

Comp2411 Tutorial No. 5:

1. Compare and contrast the three types of single-level indices, i.e., primary index, clustering index, and secondary index, in terms of their applicable conditions, and the kinds of search/queries as supportable.

2. Construct a B+ tree for the following set of key values:
(2, 3, 5, 7, 11, 17, 19, 23, 29, 31)

Assuming that the tree is initially empty, values are added in ascending order, and the order of the tree is 4 and the leaf order is 3.

For the tree derived from the above question, show the form of the tree after each of the following series of operations:

- a) Insert 9
- b) Insert 10
- c) Insert 8
- d) Delete 7
- e) Delete 3
- f) Delete 5