

Database Exercise Sheet - Indexing

Colm O'Riordan

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1. Consider a B tree of 20, 10, 15, 13, 6, 4, 2, 23 order 3 (i.e. two search values per node), show how the tree would grow given the following key values to insert:

20, 10, 15, 13, 6, 4, 2, 23

2. Consider a B+tree of order 3 (i.e. two search values per node), show how the tree would grow given the following key values to insert:

20, 10, 15, 13, 6, 4, 2, 23

3. Dynamic hashing: Assuming bucket size 2, show how an index and file would grow given the following insertions. You may assume an initial file size of 2.

40, 41, 43, 42, 45, 48, 50

4. Linear hashing: Assuming bucket size 2, show how the file would grow given the following insertions. You may assume an initial file size of 2.

40, 41, 43, 42, 45, 48, 50