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## B-tree

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Defines	order

A *B-tree of  $m$*  is a <http://planetmath.org/BalancedTreebalanced> search tree in which

- every node has at most  $m$  children,
- every node, other than a root or leaf, has at least  $m/2$  children,
- the root has at least 2 children if it is not a leaf,
- all leaf nodes appear on the same level
- a nonleaf node with  $k$  children has  $k - 1$  keys.

If the tree has  $n$  nodes its height is  $O(\log_2(n))$ .