

Tree Definitions

- A **complete binary tree** is a binary tree in which every level, except possibly the last, is completely filled, and on the last row all nodes are as far to the left as possible. (We will use this for binary min heaps. Think of reading the rows of the tree from top to bottom and left to right and writing them into contiguous locations in an array.)
- A **full binary tree** is a tree in which every node other than leaf nodes has two children. (Leaves have zero children. No node has only one child. A correctly formed Huffman coding tree is a full tree)
- A **perfect binary tree** is a full binary tree in which all leaves are at the same depth, and in which every non-leaf node has two children.