Show that the number of external nodes is n+1 if there are n internal nodes

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Suppose that a binary search tree with n internal nodes, every internal node has 2 links, left child (lc) and right child (rc), for a total of 2n links.

Every node excepe the root has a parent, for total of n-1 nodes with parenes

⇒ these n-1 nodes with parents are all children, and each of them takes up one child link

∴ unused child links (external nodes)

= (total links) - (used child links) = (2n) - (n-1) = n+1 #