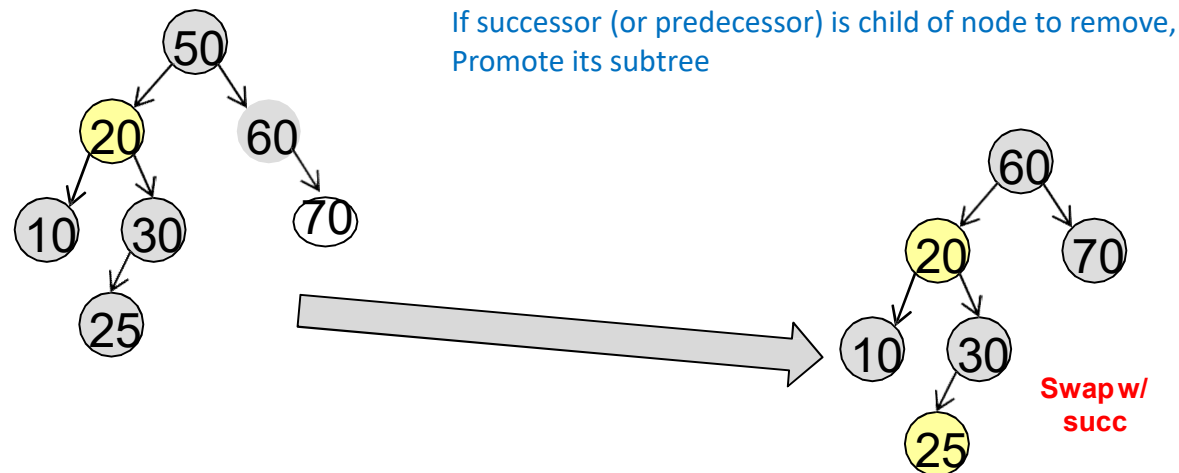# BST Removal

- To remove a value from a BST...

  - First find the node

  - If the node non-leaf node with two children, swap the value with its in-order successor or predecessor and then remove the value

  - A predecessor is either a leaf or has no right child

  - A successor is either leaf or has no left child

Remove 50

If successor (or predecessor) is child of node to remove, Promote its subtree

Swap w/ succ

BST Removal

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  - First find the node

  - If the node non-leaf node with two children, swap the value with its in-order successor or predecessor and then remove the value

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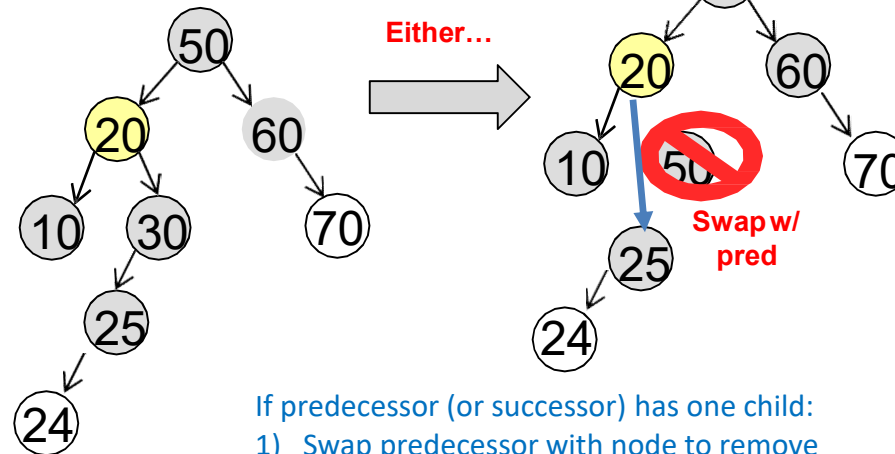 - A successor is either leaf or has no left child

Remove 50

Either…

Swap w/ pred

If predecessor (or successor) has one child:
1) Swap predecessor with node to remove
2) Remove the predecessor node and promote its only child (and its subtree)