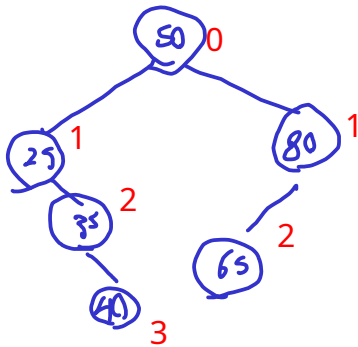
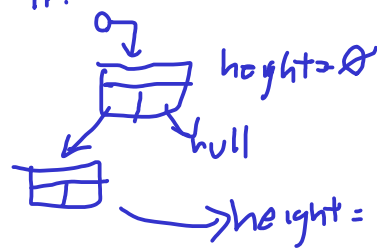


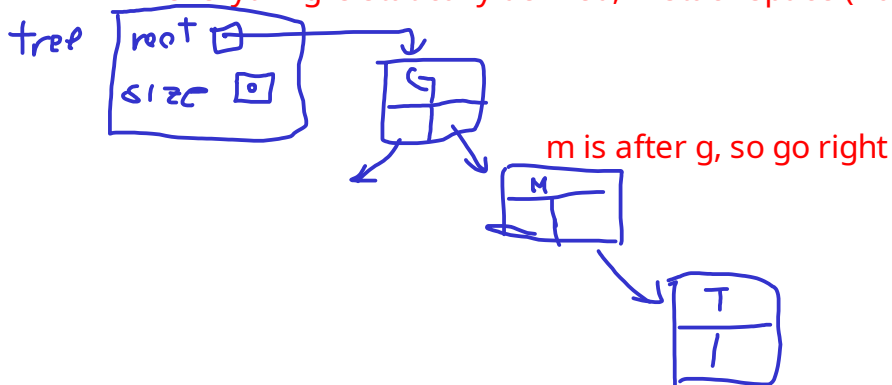
if: root 0 height = -1
null ptr

height: $1 + \max(\text{height}(\text{lst}), \text{height}(\text{rst}))$



BST class

everything is statically defined, in stack space (not heap)



preorder

50(25(10(11))(35(30)))(80(78)())

50 25 10 35 30 80 78

postorder

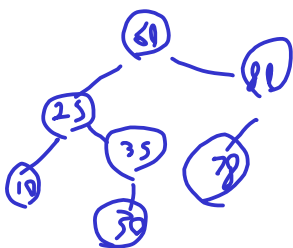
((10) (30 35 25) ((78) () 80)) 50

10 30 35 25 78 80 50

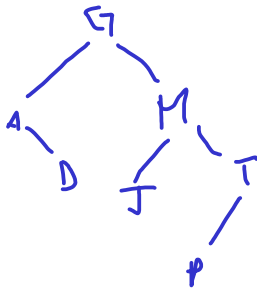
in order

(10 25 (30 35)) 50 (78 80 ())

10 25 30 35 50 78 80



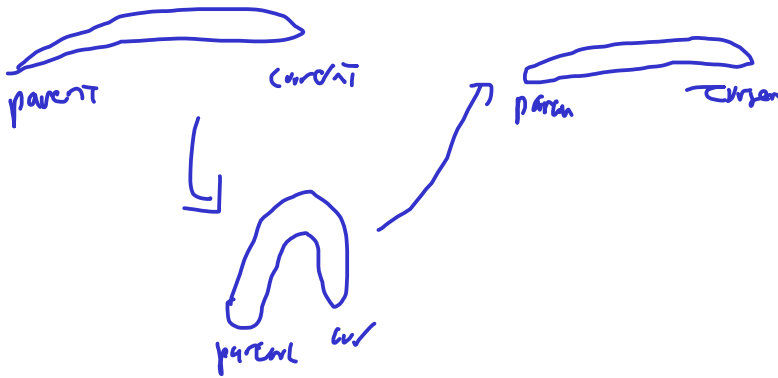
BST class contd



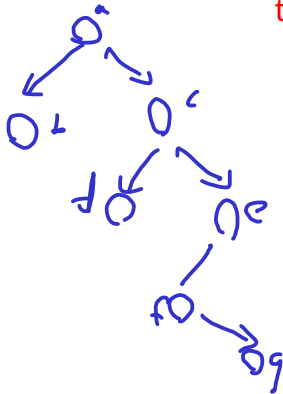
finding the path to P:
g m t p

in order: a d g j m p t
post order: d a j p t m g
pre order: g a d m j t p

inserting an element

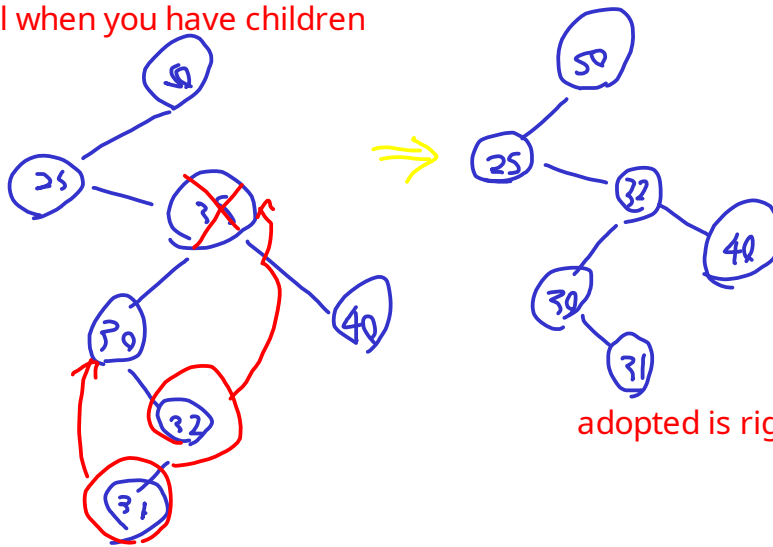


breadth first search



traverse to g: a c e f g

node removal when you have children



adopted is right child

when deleting a node that has only left children in a chain

