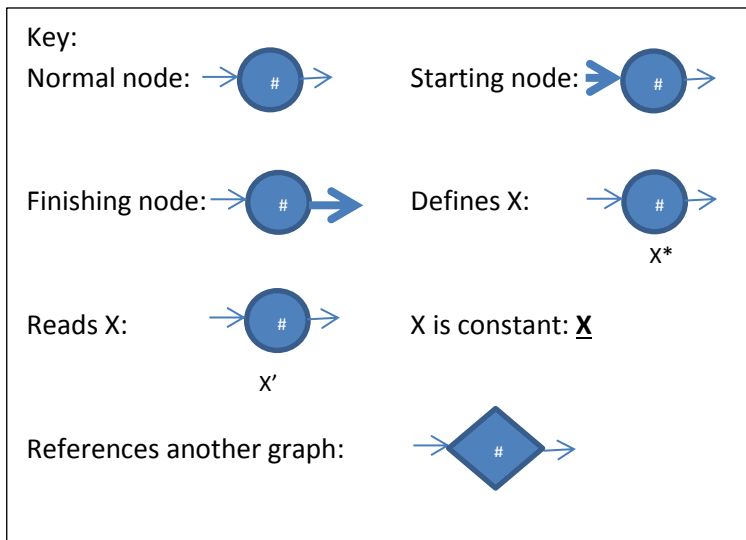


Control Flow Graph



1. `getRoot()`



Root'.left

2. `RBTreeWithFaults()`



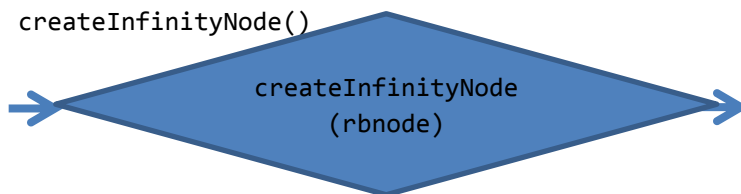
Root*

3. `RBTreeWithFaults(RBNode root)`



Root*
root'

4. `createInfinityNode()`



5. `createInfinityNode(RBNode leftchild)`



Leftchild'

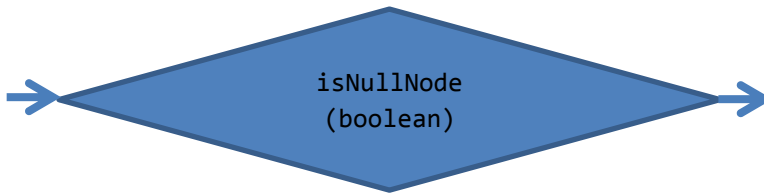
Node*

6. createNullNode(RBNode parent)

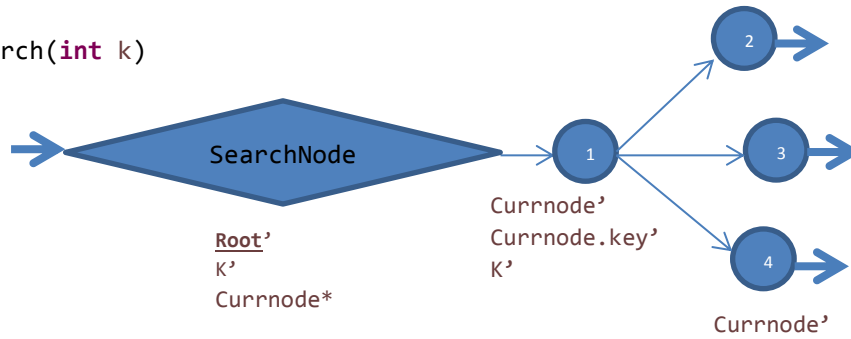


parent'
Newnode*
Newnode'

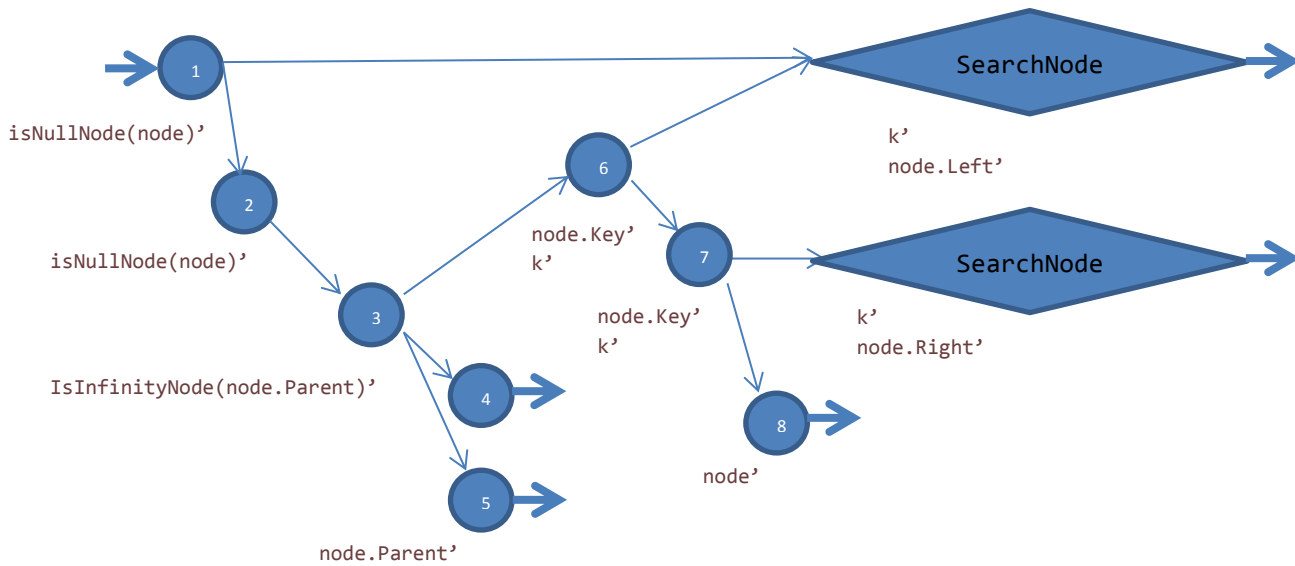
7. Empty()



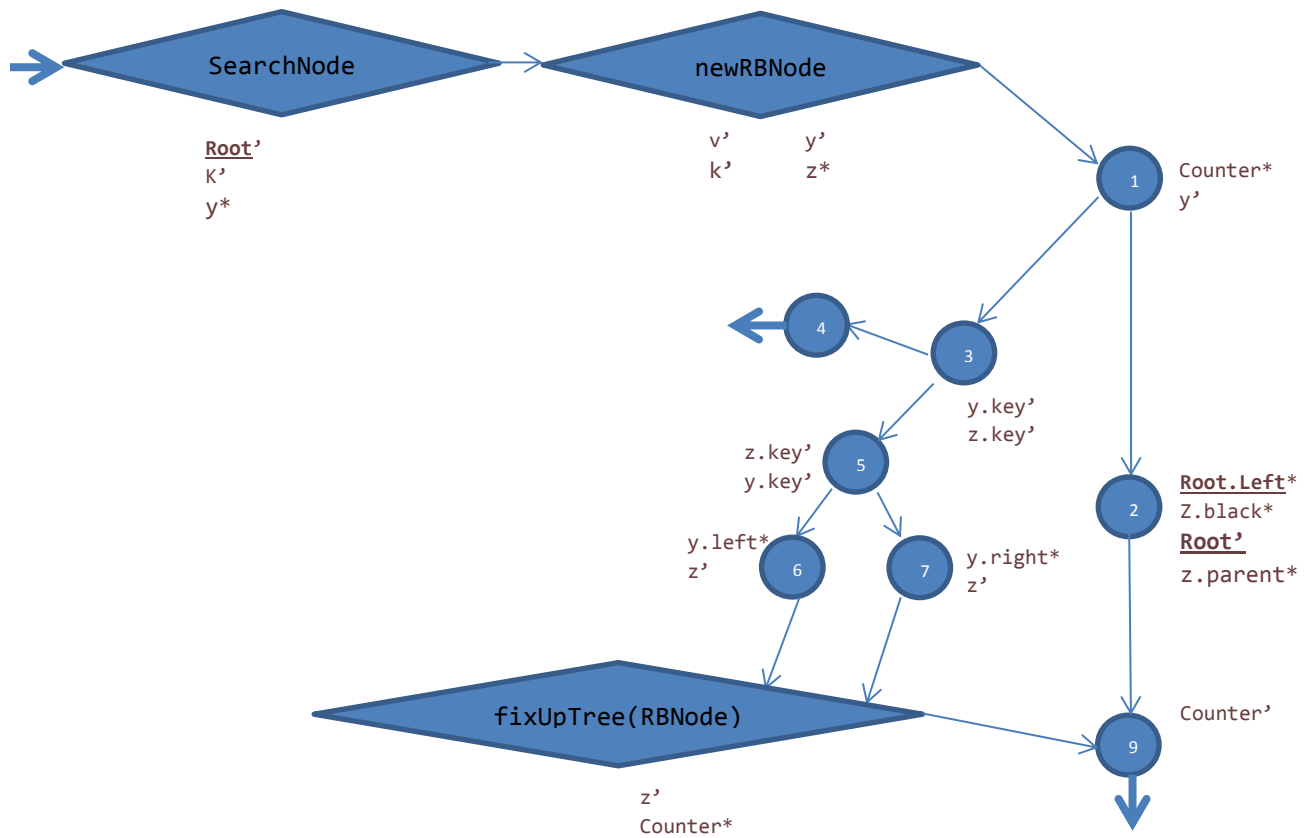
8. search(int k)



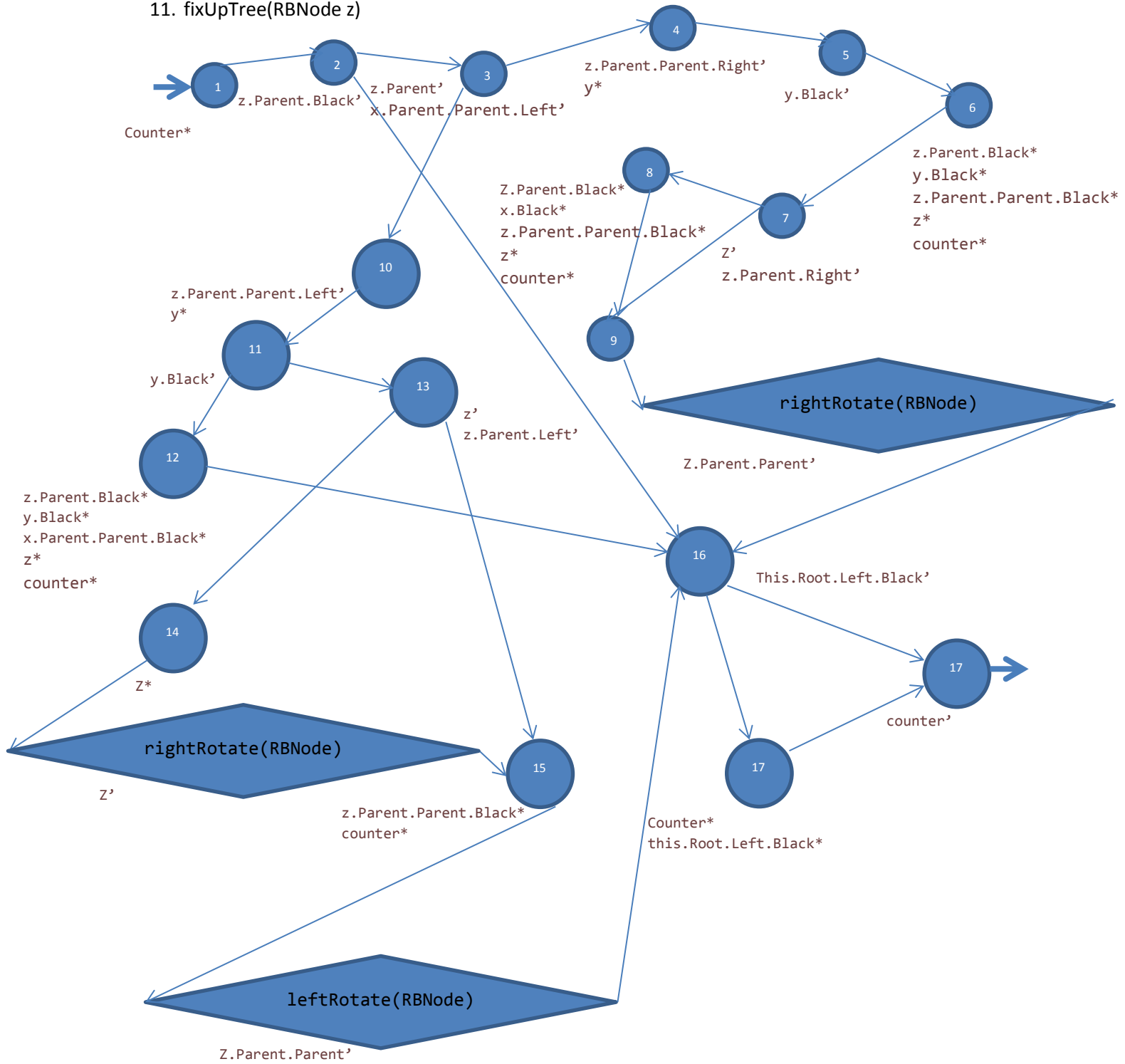
9. SearchNode(int k, RBNode node)



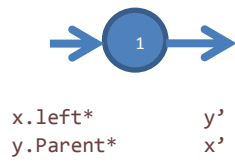
10. insert(int k, string v)



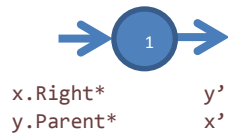
11. fixUpTree(RBNode z)



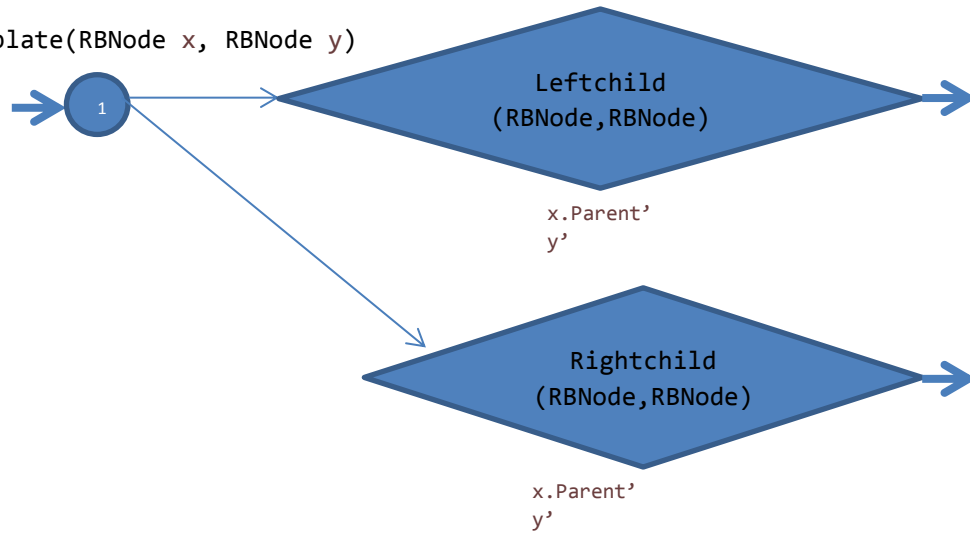
12. leftChild(RBNode x, RBNode y)



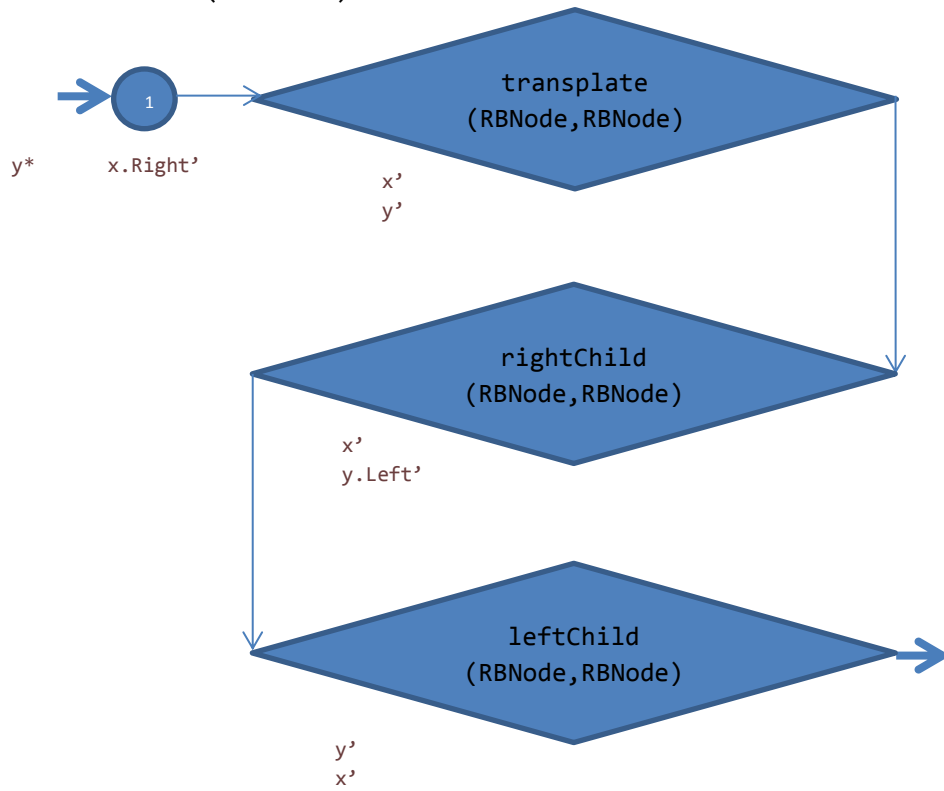
13. rightChild(RBNode x, RBNode y)



14. transplate(RBNode x, RBNode y)



15. leftRotate(RBNode x)



16. Delete(int k)

