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SHACINI-P
JBM19CS406.
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Pseudocode for Insertion in a Red-Black tree
Void RBTree: insert (const int Adata)
    Node *pf = new Node (data);
     Noot = BSTInvert (noot, pt);
    fix Violation (noot, pt);
Node &BSTInert (Node *root, Node *pt)
     if ( noot == NOCC)
       networn pt;
     if (pt > data < noot > data)
         noot-left = BSTInsent (noot-left, pt);
         not - left - parent = nool)
      else if (qt 7 data > root 7 data)
         root 7 right = BST Ensert (noot -) night, pt)
         Most - myst - parent : nort;
      neturn nost;
void RBTra !: (norder()
     inorderHelper (rvot);
 nord RBT ree: levellordel)

Conel Order Helper (root);
                                     to Months 1
                                        Wall mother
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void inorder Helper (Node + noil) 4 (not==NULL) fetury; inordattelpar (runt-) left); cout << Ant > data << " "; mondertelper(nort > right); void levellerdiffelper (Node + root) if (rosterNULL) neturn; std: 1 grene < Node +>q; q. puch (root); evlile ([q. empty)) Node + temp = 9. from(); court 12 temp - 1 datace if (tempolet != NOU) g. park (femp - (eff); if (demp - sight (= NVU) q pash (temp - right); void RBTra: notablesft (Node + knoot, Node +apt) Node \*pt\_right = pt - right: pt - night = pt-night - left; if (ptoright 1=NOCL) pt night - parent = pt; Ptzight - parent = pt + parent; if lityparent == NOCC) root = pt\_night; else if (pt=2 pt-1 parent -1 byt) Pto parent - left = pt-right) pt + parent + right = pt-right; Pt-right-left=pt

Node +pt\_left = pt - left;

Of Cpt - left | = NUCC)

- pt - point; if (pt-parent = pt-parent)

root = pt-left) else if (pt == pt = porent = left)

else pt = parent = left = pteleft;

pt = parent == pright = pteleft;

pt-left = right = pteleft; Pt-left Tright Epl; Pt-sparent = pt-lett; ( the west insite their tradular : exist there is a reported the major of a Wester ( HOME WAS TERN つき これの中のりかけん (D) interpresent