Date: 14-10-2020 AVI Trees insution and deletion LAB 5 Brogram 4 ! Node * insert (Node * node, int key) if (node == NULL) return (new Node (key)); if (key < node > key) node-> left = insert (node-> left, key); else if (key > node -> key) node-) right = insert (node-) right, key); else return node; nocte -> height = 1+ max (height (nocle -> light), height (nocle -> light)); Int balance = get Balance (nocle); if (balance 71 & key < node-> left > key) rettun rightRotate (node); i) (balance 2-1 22 key > node > right >key) return left Rotate (nocle); if (bolane >1 28 key > node-> left -> ley) noche -> left = leftlotate (noche -> left) retten righthotate (node); i) (balance 5-1 28 key < mode 7 right ->key) node-) sight = rightRotecte (node-) tight); return Lifthotate (noch); return node;

and count

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Node* delete (Mode* 200t, int key)
     i (root == NULL)
           settin soot is show I have the
      if ( key c root -> key)
           soot - left z delete ( root - left, key).
     else of Chay > root - slay)
         soot -> right = delete (root -> sight, key);
   Style their colours tours . There - story
       if (root -) left == NULL 11 noot -1 right == NULL)
 Wode stemp = root -> left ? root -> left:
      root-) right

if (temp. == not)

Femp=root;
          return squeenix took
   ( Jude will E way > made 3 1 2 3 miles ) (
              schoot = stemp.
    ( temp); si es es month
     ( refreshoon) administration a spile whom
           Node & temp = min Value Nodi (2007 - ) right);
  200+ skey = temp-skey;
    goof reight = delete ( 200+ -> right, temp > luy)
                ; (alsona) morodifai nasti
                               when with
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garasthin.
   * (100+ == NULL)
       return root; ( who we show I do to trapped to a book!
   soot -> height = 17 max (height (200+ ) lift),
                         height (root -right)).
    int balance = get Balance ( root);
    if (balance 7 1 22 get Balance (root -) left) 20)
   & (Nettun) eightRotale (200+)
    i) (balance > 1 20 get Balance (root > left) < 0)
         Root-slift = leftRotate (2004-> left);
          reltten righthotate (200+);
       (balance ( - 22 get Balance (root -> right) 70)
        hoot-right = rightRotate (root-right);
         return lefthotate (100+)
                         typic-x=+x show
    return root;
                            · elson = the furie
```

and many

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( 2001s = - Kong 1 10
 Node & righthotate (Node *node)
      Node & 2 = Node -) left;
      Node xt = mode - sight.
      1 - right = node;
   ( "hode ) left = tour way is - surshood
     Mode -> height = maix (height (node-) left)
                            height (node-) right))+1;
     of the coal soundary
     n -> height = mas (height (n -> left), height (n > light)
               selector signification ( 100+)
[ ballince on is applicated and most a higher) - a) [
Node & left lofate (Node x rode)
     Node * n = node - right.
   Node x t = n -> left;
                                    relian rest.
    er -> left = rocle;
      node) right 2t) (above about about about about significe about
    node-> height = max (height (node-) left),
                         height (node-) eight))+1;
    A -> height = max (height (r-> left),
                        height (n-) right 1) +1;
     return 2.
```

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Amsu