LAB SESSION-OF BINARY SCONON Tree Prelab: ! poctage Prelabl; Public does node ( rublic int data; Public node left, sight; Public Node (int data) ( this data adata; night = null; left ? nuy; package prelably public days Bhan search rece ( Node seats public Binary Storch True; & ride = null; public Bhangsearch Tree (the doce) reat & new node (data);

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public vaid insert (int doubta) {
         yeat = insutrade (dato, yeat);
      Node insert Node (Involute, Node roat) of
DUBLIC
         if (vat==null) (
             roatz new node (data);
             ictum voot;
         else if (dota c reat-data)
              yeat, lett = inscatated (date, ved-lett)
         else it (about year dat)
              ratinght: insertuate ( sate ratinght)
       return root;
void iroder() f
         inorder (Node (nod);
void imager node (Node voat) (
           1'f (root |= null) (
                 inorder woll (real. left);
                System, out. Prus In Creat. obtag-
                iraber rade ( root nows)
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Morage are obje
public dags permo (
       Public static and main (State ches CD) (
      phonyseochance her new blancesound
         tree. Insert ( bd);
        tree insert their, the mentioner;
        beg. Insent 130;
       becinsent (40);
         tree momen();
        500
7, The program is some as previous program
  but we odd these methods in 10 harry
  soon gree,
    void precident) (
           prechantods (xat);
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Preoder Node ( Node work) ( if (reat; enull) ( system out pohl ( val. data + " prodex note ( voot self); preader Nade ( woods right); Vaid partorder() ( post-order (vade ( vat ). 7 restorder Node ( whe read) of Vad if (read ! znull) ( system all point (real data, "\_,"); Pricorderwedl (real-left); preorderNedle real right; rod order () 1 val Perforder Nede (real); post-order Node (Nede vood) L vad if (neat propell) of restorder Nede ( reat-left); Restorder Node ( reat 8/94); Symen aut part in (real data + "

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OUT PLUT
                       and the second
and Del
                    The state of the state of
10-> 20-> 30-> 40-> 100-> 500
POST CROCK
10-> 40-> 30 -> 20 -> 500-> 4000
Pr(order)
 100-> 20 -> 10-> 30 -> 40-> 500.
an lab)
1 package inlably
  Public class Solution (
    public greenede trim (menede reat,
   Mt Low, Int high) (
       If (red- ==null)
             scham nul;
       If (roat data claw)
           return trim(real-nont, low, nont);
     reatilette frim (reat-liebte, low, laright)
      reat-left=brim(reat-right, low, high);
     return roat?
```

pooleage intable public does some ( public static void main (eming encs (7)) Sauhon sinew solution (); treenede breez new treenede (); three . Insen (3); tree. Ment 10); in July Insent 4); bree. Mosent (2); mer, Moen (no s. trin ( free , 1, 3 ), tree. Morder ()) Note & Look !! pochage inlabil; public does made for public int data; public node left night: public Node (Int obsta) ( this date adate; left 2 null; Well a null of pockage Inlobz; public dos solution ( static inte counting;

nutre state node inserted node real that obtains. if (reat == null) return her made (data) ill datac vant-data) . real letter most (roat letter data), est if Codata sociatedata) reat night = insert (reat right, douta): return reals ..... Public static Nade pethonallest chade roat, int to ) { It (reat == new 1) return null; Nede lett = 12th smallest (mat. lett, x); if (lettlenul) ston with sides ntum netton was show count H; if (count===k) return reat rauso kthomaclest (xatinight, k); Public static void Pothteth organist Mode roat, Intic) ( Node ses = 1th Snallest (soad, x). if (xer = nul)

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nodes in the BST");
   Public static void mouti(string args()) (
          Nede reat anulls
         int keys (] ? (2016, 82, 4, 12, 10, 14):
         for (int ro keys)
                reat & moent ( scatik );
         M K23;
        Print (the smallest ( reat, k);
                                output:
                           k-th snowless dement is
3. Public intercount () f
    return countright wade (real) toount let twode
 Public int count bett mode ( made recet) (
                                      Creat 1-1;
          int countro:
         while (real) ;
              reat = reat lett?
             Count ++ ;...
        rcturn
```

System-out pointln ("There are less than he

Public int counterpretural ( under reat) ( the country; white (mat 2 null) ( realtz rich-nights County; pockage inlabs, and promote the Public doss pened Public static void moun (string args()) ( Bihany search free free sinew Bihanyscarch on the time to be a part of me ()) bree , Insent (3) bree moent (9) 3. tree. Insert ( 200) bree. Moent (15) give (150) tree. moent ( 7): System. out-printen ("Target sim; " tree. Target sum: 3

1- podrage past 1061; public dos solution ( sold int sips public upid splande real, int val) { if (motionul) c. 14 Creat date = = vay) (1) If ( root pett) = ow 1) ? Node to real lett; while (to right / 2 nw1) ( ) totologue; Pr t-dala; if ( real xight = noull c Node to real right; while (feldt. I anual) of to tolet; s= tidala, doe if (recat dolg svou) ( S= Yout-dota; SP( root. Pett, vol);

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on it was dole over) !
         Privated dates
        19: ( MOST 45 GPT , MOST ) : 91
enplic static was main litting anger [] [
        Not not a row well (20);
         mot letteren nedro).
         Kat-Adutation industry.
        real left, left, you well (5);
        that yight might , new ned(130);
        solution services solutions.
          er-30(1000, 10);
    System out-position ( "Broader surceuse of
    10 is ; "45+" and businesson (c: "+6,4);
     ; (ns. tear )92.92
   By regard adsons. Justing the unable
    30 is: "text" and predessor is: "tel
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current) growder successor of 10 is: 13 and predessor By s gnadar surressa of 30 is: 35 and prodressar is: 25 2. pochoge postlab20 public dass southon & public recensede trim ( meensole yest, in- low, inthigh) ( if (real == null) - 1100 scrum null; it (roat, datac law) seturn from theat night, law, high ); if (reat data shigh) setum from (reat-left, law, high). nect. left = tom (neat. left, lew; high); noot-right = him(reat-right, law, high). octum reat ! Package postlab);

Public dass penc (

public static vaid moun (string orgs (7) ( Solution se new solution (); Treprode tree new Tree woll (); tree. Mach (4)9 tree insenting tree insert (6) 2 bree ingent (0): belinsen (2) bree, men (8): treet ingent (380 20 to to the town) tree insent(3), toch 1/20M-(8); Tree med to new Tree Nich (1)? S. Know (tree, 113), tree in order (); output. 30136,21,36,35,76,15,33,8.