```
LAB-8: - Binary Search Tree
  of melude < 87dio. h>
  of melvole < prollib. h>
  growed node
    int data;
    smet node *left;
    smuch node orgight;
                        furst a spon to ever) represent provi
 snuct node * new Node (int data) (ssur - pros).
   short hade unade = (phurt hade ) malloc
                         (sizeo (smod node));
   node - date = data; . ( ) de
   node -> left = node -> gright = NULL;
  oretom node;
smet node vinsert (emet node enot, int data)
 if (noot == NULL)
       rehm new Node (data);
 ? (data < = 900t -> data)

900t -> left = invert (200+=> left, data);
     9160t - right = Mert (2001 -) eright, date);
 else
 Jehm swot;
```

void inorda (smut node temp), 1 - 2683 - Le walnut 1 distores stoutening if (temp == NULL) inorder (temp - left); print[("y.d", temp-) data); inorder (temp-right); void preorder (shuct node * temp) [(temp = = NULL) (alob this) short again to shore print ("V.d. tomp -rdata); int preorder (temp - left); do preorder (tought); void postorder (shuck node * temp) 16 (temp == NULL) netun; postorder (temp > left); postorder (temp - sight); print ("./d", temp > data)"; (2406; Alpine (-4000) From: 5 Hiptor (-4040) todo arulos.

int main () smet node + noot = NOLE, blome) they shaped int data, choice; print (" Enter your choice: In 1. Insert In 2. Print do Inorder | n 3. Print Preorder | n 4. Print Postorder | n 5. Exit (n"); sconf ("r.d", d chorce); switch (chorce) case! : pront/ ("Enter velue to be mested: Scen ("/d", &data); groot = intert (noot, data); case 2: print ("Inorder troversal of bring tree 15 (n "); Print Horder inorder (root); Print Presider proht (" \n"); break;

care 3: print/ (" preorder howered of briony nee is Enter value Bre your pre order (1 2001); 1. Intert 2. prout In print[("In"); Care 4: printf (" Postorder havered of brieny tree 15)nº) 3. Port Pro H. PAN Po 5. EXIL postorder (root); prints (" (n"); enter value break; Enter you : pmuf (" Eximg -.. "); 1. heert g. Print 11 break ; 3. Prout P default: pront ("Invalid choice"); 4. Print P 5. EXIL Enter value] while (chorce! = 5); Buter you neturn O'; bout the of solve to 1. Inter 2. print 3- Print output; 4. Pront Enter your choice: 5, KN 1- Insert 2. Privit Inorder Enter a 3. Print Preorder delos enter 1. hse 5. EML 2. Prin Enter value to be mested: 20 Enter your charces, word selvers 3. Pm 4. Pm 5 V EN 2. Print Inorder 3. Print Preorder ENTER 4. Print Postorda 5. Exit i Nogra

brong mee is In 7. 1 Ever value to be mested:10 giver your choice: 1300 is 18 1. Injert g. prout Inorder many tree is) no) object Larg. 8 3. Port Preorder open to at some 11 H. Print Postorde. 5. EXIL enter your chorce: 1. heert g. Print Inorder : 33 tolo 4000 -3143 3. Pront Preorder listal 1 4. Print Postorder o pour truck & 5. Exit abroads trust & A prob Posionale Enter value to be merted:5 onter you choice: Preorder Hoversol. 3) brong free 15: Herry 1. Insert g. Print Inorder 80 10 5 15 30 His 3. Print Preorder : steel your charze: 4. Pront Postorder P. 3500 1 5, Kx4 islaman brook Enter value to be inverted: 15 S front Preorder H Parts Postoroles Ever your chorce: Postorales incressed of bevory siece Es. 1. hsert 2. Print Inorder 3. Print Preorder 1 15 10 81 50 80 4. Print Postorder 5 · Exil the value to be merted: 45

Leetwode -1 Ro or bottom of of sulovices Enter your choice: 1. meet estreal tras a 3 :16 (neod = : 2. Print Inorder port provides net 3. Print Proorde Print Postavole. 4. Print Postorder int len = 5. Ezib 8mut h 2 Inorder hoversal of brong hee is while Ct with man word 5 10 15 20 30 45 1,021 east inorder Enler your choice: storons from 1. Inert Part Postordor 2. Print Inorde K = K 3. Print Preordo if (K= 4. Pront Posto roler 5. popula to be maded it 5. Enit 8 moch Preorder honersal of bonony tree is: for (volved fried 20 10 5 15 30 45 sobrossy form Enter your chore: rebroken Lord 1 1. mself 2. Pront Inorder the value to be invested : It 3 Print Preorder H. Print Postoroler : words wor waters 5. Exit Postoroler traversal of brong tree is: 1 10301 obser tini 5 15 10 45 30 20 islands of their it Ette value to be inspited: 115