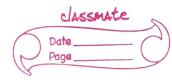
Date
LAB Poparain:
LAB Program: Binary Search tree:
Finclude (Stdio. h7
#include (como.h)
#include < process. h?
Struct node
£ Addition to the same of the
lut info;
struct node *rlinle;
Strutt node + llink;
\(\frac{\partial}{2}\)
typedef struct mode * NOPE;
NODE getwode()
NODEX;
x = (NODE) maker (Size of (Struct node)); y (x = = NVU)
print (ec men full (n°)); exit (o);
exit(o);
2 return x;
5
Youd free mode (NODE X)
zee (x);
NOPE unsert (NOPE root, unt item)
S
NODE temps Cus proeus
NODE temps (un, proeu)  temp = getwode ();  temp > 8 link = NULL')
temp > & link = NULL'

temp > llight - NULL' temp >info = Hem? if (root == NVLL) return temp; grew = NULL'S Cur - 200t while (har != NULL) pren = Cus; Cur - (item < cur >info ) ? Cur > llink: cur > 8 of (Hem (prev-)info) return mot; roid display (NOPE root, unt i) 4 (root 1 = NULL) display (soot > alink , i+1); for (j=0) j(i) jt-1)

print (ee "))

print (u olodla" groot >inta) display (mot > llink , i+1); NODE delde (NOPE most guit item) NOPE Curs parent, q , sao 5



uf (rool = = NUU) return root; parent = NULES cur = root; while ( Cur) = NULL ff item 1 = Lun ) info Parent = Cur > Cur print(cee not found in"); of Cons Wink = = NVW 9 = Cur - rlinks else if C cu > olink == Nvu) 9 = Cur > Winks else suc = cur > slinks while (suc -> link) = NVID Suc = Suc > Ulinki Suc> !link = La> [link) q = Cur > rlink; of (powent == NUL) return 9; if Cour == parent > Winh )

parent > Wink = q; freemode (cur); bretun root; roid prevader (Nort root) (moot != NULD) printfee god In 5 root > info); prevolee (root->rlink); void post order (NODE root) y (root! = NULL) postooder (roof->llin10); postorder ( root -> rlin/1); printflee oloding groot sinfo) 4 gold unorder (NOPE goot) of (root)=NUU) un order (root > llink); printf ( el.dln g soot > llink); invoder (root Tolink)

P



gold main () unt îtem, choice; NOOF goot = NULL'S Jool 33) prints (ec In1. insert In2. diplay In3. proe 4. jost Ins.in Inb. delete In7. exit In") Prints (ec Enter the Chrice In"); Scanf (ec old", funce); Switch ( Chrice) Case li print ( Enter the item In ") ); Scanf ( ee 1d " of item ); root = linsert ( root gitem), Case 2: display (200t, 0);

Areak;

Case 3: Pre order (200t);

Menk; Case 4: postosoler (500t); Case 5: unorder (rout) break; Case 6: printfle Entor the item In"); Scanflee old " of Hem); rout = delete ( root , item); defaut : exit (0);