Date Page

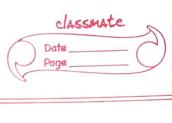
LAB Program Doubly linked list # include (Stdio h7 #indude < como 1> #inunde & process . h # include ( Stallit h7 strut node dut info; stand mode \* llink; typedet struct node \* Nopt; NODE getrade () X = (NODE) mallac (size of (struct hode));

uf (x == NULL) print (ce mem full 120); exit (o); void freehode (NODE X) NODE dinsort front (unt otem a NODE head) NODE temp, cui, temp= getnode ();

temp >inp = item; Cur = head > rlink) head -> or link = temp; temp > llonk = head; temp > olink = Cur) Cur > Wink = temp; return head; NODE temp, curs pew; temp= getnode(); temp>info=item; Cur = head -> &link > while (ixpos of Cur 1=head) { per = Cur; Cur = Cur-> v link; of (cur = = head) pointflee Position not found In ); Pew -> alink -temps temportink = Cur's Cur > llink = pew; Telian head; NODE dursert roas ( int item, NODE head)

Noné temp, aus temp = getrade () 5 temp-info = item; Cur = head > llink; head > Uinlc = temp; temp- olini = head ; temp > llink = lur j an > shink = temp; return head; NOPE ddelete front (NODE head) NOPE Cury next; y c nead ->rlink == head) Printf (ee dg empty In?)) cur = Usead -> Tlink; next = Cur > rlinks head > & wink = next) next > Clink= head) printf (le the mode deleted is god", and peensole (lux); return head; ddelete rear (NODE head) NODE cur, grev; y (head > r(ink = head)

z relien head;



clu = head > llinks heard > llink = previ prev > rlink = head; prints ce the unde deleted is god glusing) Jeenode (cur) Dreturn hand; Yord dis play (NODE head) if Chead Sorlink == nead) printf (ed dg, empty In??) printf (ce Contents of da In")); temp = head > rlink; while (temp! = head) printf (ee o/od It", temp >info); temp= temp> nink; printf(ce [n")) NODE head, last; unt item, pos, choice, head = get mode (?;
head = relink = head; chead > (link = head)

point (ec 11a1: unsert point 12: insert-rea H3. delete front 144: delete rear H5: display 146: left-side -insert It 7. exit |n ?) printf (ee Enter the choice In"); Scant (ee olod " of Chroice); Switch (Chorce) Case 1: point f ( Enter the Hem at front end In") Scanf (eg.d ? , fitem) last = dinsert\_front (item, head) break; Case 2: printf Ce Enter the item at great head Scanf (ee o/.d ", fitem) last = dinsert\_rear (item, head) Case 3: (ast = ddelete front (head); break; Case 4: last = ddelete - rear (head) breaks Case 5' display (head); break; Case 6: printf (ee Enter the Hom at left pos to entered in"); Scarf (ce plad , gitem); printf (ce Position (to)) & count (ec. V.d, Fp8) last = durient left pos (item, head, post) getch (7)