20/ De cem 20/23 neado / (N) 0 0 - Went // Jeason of an element TO (N), O(1), O(1) Linked-List The wind of photos Interesting node in the to - doonot store at configuous tolation, use in stacks / Queues. I have a state of Example : Soll Kon element of value !: stamped mt 2=3; 0 mt\* y = 221 - 2 9 - 5 0 0 cout << & < corde ; } 11 Pernt the Pornte 0 to the & with the reference to 27 of (head == NULL) of courses NULLI 32 bit biod = 9mg \* 6457t Memory I But I stayte is data i but I byte ? \* - D 4 byte 3 Pointer 2 \* - D 8 byte 3 8 byte convert array à de la la transformation Node \* tem = head 15,018, 7 1989 \* 960N (JUVI) 21 9mg ) Jihle [5] (+++n)·· (D moves (P== 411)) 91 - toon - 10001 - 10001 PREV = EMP ; font = font - 30 ext; setusy head ; 3

Insection ?- hand author on around !-Noche \* Propert At Head ( Noche head , M+ val) S geturn new Node ( val, head) 3 Nodex heret Attail ( Node \* hood, Mt val)? If C nead == NULL) { seturan new Node (Val); Nodex somp = head; uehile (temp-> nont = NUU) ? temp = temp - ment; temp-7 nont = new Node(val) g return hand s

21 190000 200 | 23 No dex meet At K (Noge\* bead, Nodex MeetBeforeValue (Nodex Mt el, mt k) 2 bead, Intel, Int val)? if (head == NULL){ if nead == NVLL) { if (K==1){ Extran head; "Beturn new Node (a); II (head->data == val) { che Express NULLS ecturn new Node (el, head); 0 0 Node \* EMP = head; if ( k==1) ? webste ( semp-> pont = NULL) ceturn now Node (el, lead); if CHMP-7 Mat->data 0 == val)? int ant=0) Noele \* neurode = Nodex temp = head; new Node (el, tomp-> next white ( temp &= NVLL) } Emp-mont = new Node ] (nt tt) 9 ( balak ) if (Int==K)? 7 5 Næde \* nowNode = temp= tonp-roport/ new Node (el, +mp->noxt); EMP-7 pont = newNode; boeak; return head j temp= temp-) nont; getran read) 12 K = NILL

Baverel > O(N) tength - O (N) nead fearon of an element > O(N), O(1), O(N) seleting a node in LL D tait box nit Interesting node in the 1 disonet yese at confineus beeaten Delete a node in Linkal 49st Thead, Parl, Kon element & value & 3-P5-P7-P mull-(m) cout sc & sends; { 11 Reposition to FO the & with me Remove K () ? if (head = = NULL) { seturos NULL; } PF (K==1) d, Node\* temp = head; + bead = head > next; for the feir (don't) son & ship of sechus head; mt critzo; It is marker to series Node \* temp = head; Node \* prev = NULUS white ( tomp of NWLE) 5 ont++; [] 0 if (cont == k) { 1200N -7 nont = 120N - 7 nont - 7 nont m feee (temp);
break; (m) PERV ZEMP; femP= jemP-yoext; return head i 3 0 Deletton 8- mondo contan MX proposit X & + { remove head from LL3 Node\* comprehead (Nocle\* need) { if ( read = = NULL) setusts need; Nodex temp = head i bead = head - meat 1 Keel ( temp); represen head in some + I remove tall from LL3 Nodex compretate (Node+nead) if (nead == NULL OF bead - 7 next == NULL) { Jechisen NULL; makens of the second of the s Nodex temp = head; uchile ( (EMP-71014)-711024 )= NULL)& temp = temp -> next 1 1251 E-1382 = 203(14 1880) 1600 (AMB-2004); Jemp-7 nont = NVIL; 3 repurn head; former for promet

+ 2 Romoneting km Poetston clossont in the 223 4 [ Remove head teem tist } Node \* conquexth (Node \* head , But K) { if (nead = = NULL) & Genera NULL; } If C K==171Kood = grost x9loon Nodex emp = head; nead = nead-7 next; feel (temp) just many leepurn head; the fearence that keeps that Medex conservant ( Nico= tro) the Mode\* Peer Znuthish) Nodex temp = head; ushile (temp == NULL) ? Moder templet the 13011 = ( +017-(if (Cnt == K)) {100 free (kmp); peer-700est = (1280 V-5102+)-7 nont; feel (temp-) most); i July break; mai Echin heart ? per = temp, femp= temp-700001 return head )

& I persone me value operant in me 227 Nodex comoue El ( Nodex head, mt a) } if ( bead = = NULL) & cepuen NULL; 3 if Chead-7 data == e1) { Node x xonp = head. head = head - Theat; free (temp); UN== lossed ) 45 when head ; Node + pro = NULL; ASSOUT Node \* temp = head; while ( temp 3 = NVU) } if (pmp -7 data == e1) { (kee (kmp); prev-ment = (prev-ment)->nexts popak! prev = pmp; pmp = pmp-meat; actuan hard;