

1. WAP to implement Singly Cinked List with following operations; as create a linked list is Ingestion of a node at first position at any position and at end of list copieday the contents of the limbed list. #include< Stdiah> struct node?

int data;

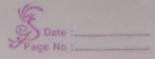
struct node * next; struct node & head = NULL, * newhode, * temp; printfl'Enter the no. of elements: \n'); scanfl'%d", 8 n); forli=0; ikn;i++) nes node: (struct node +) mallo (size of (struct node); printf("Enter the %d element: In", i+1); scanf ("%d", & newhoode +data); newhoode + next = NULL; if (head = : on VII)

} temp: head = new node;

tempt next: neverade; temp = newnode; void display () temp: head ; printf ("The elements are: \n')?
while I temp! = NULL) printe (" % d/n", temp + data); temp = temp - next; void incert-beg() newnode: (struct node *) mallor (size of (struction) printf ("enter the new element: (n'); scarfil" %.d", & newnode + data); neumode + next = head? head : newnode; to be the box of the board of void Encert-end () remonde: letouct node * malloc (six eof (strution) prints ["Foter the new element In"] scanf (" of d", 8, newhood + data)

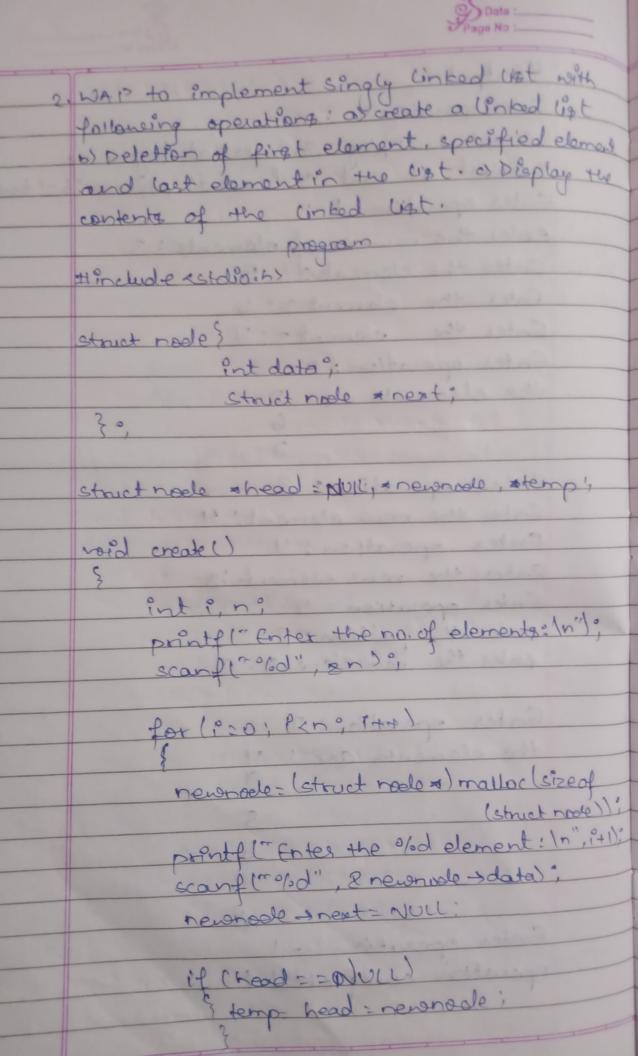
newhoode + next : NULL", temps head;
while Ltemp+next 1= NULL) temp: temp > nexti temp + next = nenonade; void insert- pos () int pos, iso; nennode: (struct node a) malloc (size of (structrode)); prints ("Enter the position: \n"); scanf ("%d", 8 pos)? Pf(posco) printf ("invalid position in"); temp: head; Nahale (icpos-1) temps temp-s next; printf ("Enter the new element In")? Scanf ("1.d", 8 new nod - data); newhoods + next = temp + next; temp -> next = newnode ;

void main () Int choice; while (1) printfl' Enter operation: In1. create Inz. dispos In 3. Encert at beginning Ince incertal end Ins. insert at a position in bill end In"); Scanfleold', & choice); if (choice::-1) printif operation completed! \n"); break ! snaitch (chaice) case 1: create (): break; case?; display(); break; case 3: Proceed beg () break? case 4 : incest end () case 5 : Procent-post); break; defaut : pointfl'invalid input!



11 octput
Enter operation!
1. create 2 display 3. insert at beginning
1. create 2 display 3. insert at beginning 4. Susert at end 3 insert at position 6-1 bed
Enter operation !)
enter the number of elements: 3
Enter the element 1: 5
Enter the abmost 2:6
Enter the elements: 7
Enter operation: 2
the elements are: 5
6
the elaments are: 5
enter operation: 3
Enter the new element: 4
Enter operation: 4
Enter the row element: 8
Enter operation: 5
ender the paition: 2
enter the non-element: 9
Enter operation: 2
the elements are : 4
Market Balant daniel of any
5
1. I was him great to 6) him
and the same of th
8 .
Forder operation: -1
operation completed!

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X
C:\Users\bmsce\Desktop\22cs300\linkedList.exe
                                                                                                                    Enter operation:
1.create
2.display
3.insert at beginnning
4.insert at end
5.insert at position
6.-1 to end
Enter operation:1
enter the number of elements:
Enter the element 1:
Enter the element 2:
Enter the element 3:
Enter operation:3
Enter the new element:
Enter operation:4
Enter the new element:
Enter operation:5
enter the position:
Enter the new element:
Enter operation:2
the elements are:
Enter operation:-1
operation completed!
                           execution time : 86.160 s
Process returned 0 (0x0)
```



else } temp + next = newnode; temp: newhode; void display () temp: head : pointfl"The elements are: In"); vohile (temp!= NULL) printf(" "dln", temp + data);
temp = temp + next; void delete-beg() temp: head ; if chead == e NULL) 2 pointf (" list is empty"); head: temp+ next; free (temp);

void delete- end) struct node = prenode; tempshead; while (temp+ next!= NULL) prenode = temp; temp : temp > next; if (temp= head) { head = NULL; } else } prenade + reat = ayuis free (temp); void delete-pos() struct mode & neptrode; Post pos , i=1; temp: head ; printf ("enter position \n"); scanf (" " (d", & pos); while (ix pos) temp = temp = rest; P++? newtrade = temp + next; temp > next : next node + rout) free (nextrude); int choice;

while (1) I printf ("Enter operation: In create Ins. display In3. delete at beginning In4. delete at end Ins. delete at a position Inc. - 1 to end In"); scanf ("%d", & choice); if (choice = =-1) printfl" operation completed ! in"); else { switch (choice) casel: create(); couse 2: display (); break; call 3 : delete beg() break, case 4: delete_end() couse 5: delete-pos() break; default: printf ("invalid input loi) 1 output Enter operation! 1. create 2. display 3. delete at beginning

4. delete at end 5-delete at position 6. - 1 to end Enter operation: 1 enter the number of elements! 4 Enter the element 1: 5 Enter the element 2: 6 enter the clonest 3: 7 Enter the element 4:8 Enter operation: 2 The elements are: Enter operation: 3 Enter operation: 2 The elements are: 6 Onter operation: 4 Enter operation. ? The elements are : 6 Enter operation: 5 Enter the position: 2 Enter operation: 82 The elements are: 6 Enter operation: -1 operation completed!

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    C:\Users\bmsce\Desktop\22cs300\linkedlist2.exe

                                                                                                                       ×
 Enter operation:
tr1.create
s)2.display
 3.delete at beginnning
 4.delete at end
 5.delete at position
 6.-1 to end
 Enter operation:
 enter the number of elements:
Enter the element 1:
 Enter the element 2:
 Enter the element 3:
 Enter the element 4:
or Enter operation:
 Enter operation:
 The elements are:
 Enter operation:
 enter the position:
 Enter operation:
(The elements are:
eaEnter operation:
eaoperation completed!
Process returned 0 (0x0)
                             execution time : 49.771 s
se 4:delete end();
```