	PAGE NO:
	#Singly Linked List
8	Write a grand his
	Operations:
a	Oreste a linked list
Ь	Insertion of a node at livet mile
C	Display the content of linked list
	#include < stdio.n>
	# Indude < Std 176. h>
	Struct Node of
	int data;
	struct Node * link;
	<b>y</b> ;
	typedy struct Node node;
	noch *new 1, * curr, * ptr , * start = NULL;
	word and the
	Void Levate ();
	void display ();
I	void InsertPosition();
	void Insert End ();
	voia moen cha(1,
	Void main ()
	in ch;
	while (1) &
	print f (" In 1. Greate In 2. Display In 3. Invent at Beginning In 4.
	Insert at Position 145. Insert at End 146. Exit");
	printf ("Kenten Your choice: ");
,	Scanfl"/d", dch);

Swilch (ch) E
ewitch ((4))
louak;
case 2: display ();
lonak,
case 3: Insertitant ();
Loreak;
case 4: Intertiposition();
Lorrak;
case S: Smett End ();
Lose S: Smerichasi,
souch;
 lovak;
3
3
3
vaid sreate () f
char ch;
dof
new 1 = (node *) malloc ( 2ized (node));
printf(" \n Enter Value: ");
 Scanf("1.d", d new 1-> data).
 if (Start = = NULL)
 £ /
start = new 1;
 curr= new 1;
3
else ,
Quer -> link = new ?:

	PAGE NO : DATE :	
Cury= new 1;		
3		
pointfl''Do You Want to Add an Element	2 (412) ").	
Scant (" 1. c", & ch);	7 ( 1(N) ),	
3 while (ch == 'y' 11 ch == 'y').		
aur - link = NULL;		
3		
void display () &	- Carles Ass.	
if (start == NULL) f	. ,	
printf("Linked hist is Empty. ");		
Julian,	3	
3		
7 11 - 3 1 - 3		
ptn = start;		
print (" The Elements of Linked list are: ");	()	
while (ptr != nyre) {		
peantf("1.d "1, ptr > data);	5.	
ptn = ptn -> link;		
4		
print f (" \n ");		
A		
Vaid Insentstant () &		
new 1 = (node *) mallor (size of (node));		
printf ("In Enter Value: ");		
& (start = = NULL) (		
Start = new 1;		
New 1 -> link = NULL;		
return;	,	
3		

```
elsel
             ne 1-> link - start,
             start= new 1;
           return,
Void Insert End () C
       new 1 = (node x) malloc (sized (node));
       printf ("In Inter Value: ").
        scanf (" 1.d", & new 1 -7 data);
        4 (Start == NULL)&
              start=new 1;
                   new 1-> link = NULL;
                  return;
         ptn = start;
         while (ptr -> link: 1/= NULU)
                 ptv=ptv -> link;
         ptr -> link = new 1;
         news 1 - link = NULL;
         geturn.
void Insert Position () of
       New 1 = (node #) mallor (sized (node));
        printf ("Enter Value: ");
        &canf (" 1.d", & new 1 -> data );
        if (start =: NULL) &
```

	PAGE NO : DATE :
Start = new 1;	DATE:
new 1 -> link= NOLL;	
return;	
)	
int i=1, pos;	
ptr=start;	
printf("In Entry Position: ");	
Scan f (" /. d", & pos);	
wohile (ptr != NULL 28 ic pos-1) {	
ptr = ptr -> link;	
i++;	, -
nition;	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
3	
new 1 -> link=ptr -> link;	
ptr -> link = newl;	,
3	<u> </u>
0.4	
Output	· · · · · · · · · · · · · · · · · · ·
1. Create	
2. Dis day	
 3. Insert at Beginning	* of
4. Insert at Position	
5. Insert at End	
Enter Your Charice: 1/	
Enter Value: 10	
Do You Want to Add an Element (YIN)? Y	
Enter Value: 20	
Do You Want to Adol on Element (41N)? n	
The line was	

,

	1. Creati
	2. Display
	3. Insert at Start
	4 Awert at Pasition
	5. Insert at End
	6. Enit
	Fit your Chaice: 2
	Elements in Linked List:
	10 20
	Enter Your Chaire: 3
	Enter Value: 30
1	Enter Your Choice: 4
	Enter Value: 40
	Enter Position: 2
	*3 / 2 / 2
2	Enter Your Choice: 5
	Enter Value: 50
7	Enter Your Chaice: 62
	Elements in Linked Lif:
	30 40 10 20 50
	Enter Your Chaice: 6
	The same of

		PAGE NO :
	# Linked List-Deletion	DATE: 12/11/2024
02	Writes a program to implement a	
	Writes a program to implement singly Linked hist u  a) breate a Linked List  b) Deletion of Link di	with the following correlations
	b) Deletion of first element	printing specialists.
	b) Deletion of first element, specified element and	last element
	void Deletestant () {	
	if (Start == NULL) {	
	pount ("In hinked hist is Emply In");	
	return,	
	3	
	node * temp = stant;	
	start = start -> link;	As a second
	free ( temp);	
	printf("In Eirst Element Deleted. In");	1.1
	3	v 2.
	Void Deletifosition () &	
	int (=1 pos;	
	if (start = = null) {	
	porint (" In hinked hist is Empty. ");	
	reltim;	
	· ·	
	printf(" Finter Pasition: ");	
	2 canf("1.d", d pas);	
	node * temp = start;	
	node * pro = Nuce;	
	$if (pos = 1) \xi$	
	2tart = temp -> link;	
	free (temp);	
	y in the property of the prope	
1	II	

```
print ("flement at 1 d deluted", pes);
            sution,
        while (temp != NULL ERILpos) (
              temp = temp -> link;
       if (temp == NULL) &
           print ("Position Not found");
      grev -> link = temp -> link;
      fre (temp);
      printf("Flement at Position 1.d Doleted", pos);
Void Delete End () &
      if ( Start = = NULL) &
         Start = NULL;
            free (temp);
             print f("Last Element Deleted");
      3
      while (temp = link 1= NULL) of
             porer = temp;
             temp = temp -> 1mk;
     prev - link = NVLL;
     free (temp);
    printf " Last Element Delited");
```

	PAGE NO : DATE :	
	Output	
	1. Quati	
	2 Display	
	3. Delete from Beginning	
	4. Delete from Position	
	5. Delete from End	
	6. Exit	
7	Enter Your Choice 1	
	Enter Value: 10	
	Enter Value: 20	
	Enter Value: 30	
	Kentin Value. 40	
	Enter Value: 50	
	Enter Value: 60	
	Lo You Want to Add an Element (YIN)? n	
カ	Enter Your Choice: 2	
	Elements in Linked List:	
	10 20 30 40 50 60	
9	Enter Your Charice: 3	
	Einst Elemont Delited.	
9	Enter Your Choice: 5	
	Last Element Deletat.	
7	No. of the state o	
	Enter Pasifron: 2	
	Element at Pasition 2 Deleted	
-7	Enter Your Chaice: 2	

