1BM19CS044 Link List
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```
#include<stdio.h>
#include<stdlib.h>
void create();
void display();
Void delfun(int);
Void  insert_before();
Struct node
{
   int data;
   Struct node *next;
};
Struct node *head=NULL;
int main(int argc, char **argv)
{
  int choice, ele;
  char ch;
  do
  {
   Printf("1. create\n 2. Display\n 3. Delete\n
             4. insert_before\n");
Printf("Enter your Choice:");
 Scanf("%d", &choice);
 Switch(Choice)
 {
   Case 1: Create();
        break;
   Case 2: display();
        break;
  Case 3: Printf("Enter the element to be
                  deleted \n");
    Scanf("%d", & ele);
   delfun(ele);
        break;
  Case 4: insert_before();
        break;
 }
Printf("Do you want to Continue(y||Y):");
  fflush(Stdin)
 Scanf("%c", &ch);
} while(ch=='y'||ch=='Y');
}
```

```
Void create
{
 Struct node *newnode, *temp;
 int item;
newnode=(structnode*)malloc(sizeof(struct node));
 Printf("Enter the data);
  Scanf("%d", &item);
 newnode->data=item;
 if(head==NULL)
 {
  newnode->next=NULL;
    head=newnode;
    Printf("Node created\n");
  }
  else
 {
  temp=head;
  While(temp->next!=NULL)
  {
    temp=temp->next;
  }
  temp->next=newnode;
  newnode->next=NULL;
```

```
     Printf(" Node Created\n");
    }
  }

 Void display()
 {
   Struct node *ptr = NULL;
        ptr = head;
      if (ptr = NULL)
      {
        Printf(" Nothing to Print\n");
      }
      else
      {
        While(ptr! = NULL)
        {
       Printf ("%d", ptr->data);
         ptr = ptr->next;
        }
      }
  }
```

```
Void  delfun(int ele)
{
  Struct node  *temp, *del=NULL;
  if (head==NULL)
  {
  Printf("Empty list, can't delete\n");
    return;
  }
  temp=head;
  if(head->data==ele)
  {
    head=head->next;
    return;
  }
  While(temp->next!=NULL)
  {
   if(temp->next->data==ele)
   {
     del=temp->next;
    if(del->next==NULL)
    temp->next=NULL;
    else
    temp->next=del->next;
   }
   else
     temp = temp->next;
  }
   if (del = = NULL)
  {
   Printf("Element not found \n");
      return;
  }
 }
 Void insert_before()
 {
   Struct node*newnode;
   int ele;
   Printf("Enter the element:");
     Scanf("%d", &ele);

newnode=(Struct node*) malloc (sizeof(Struct node));
  newnode ->data = ele;
  newnode -> next = head
    head = newnode;
 }
```