link list.c

```c
#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("\n1. Create \n2. Display  \n3. Delete  \n4. Insert_before \n");
    printf("\nEnter 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;
```

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        case 4: insert_before();
                break;
    }
    printf("\nDo 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 =(struct node *) 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;
```

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    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;
        }
    }

}
```

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}

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)
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            temp->next=del->next;
        }

        else
            temp=temp->next;
    }
    if(del==NULL)
    {
        printf("Element not found in the list\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;


}
```