WAP to Implement doubly link list with primitive operations
I.Create a doubly linked list.
II. Insert a new node to the left of the node.
III. Delete the node based on a specific value
IV. Display the contents of the list

```
#include <stdio.h>
#include <stdlib.h>
struct node{
int data;
struct node* prev;
struct node* next;
};
void insertatbeg(struct node**head_ref,int new_data)
{
    struct node* new_node=(struct node*)malloc(sizeof(struct node));
    new_node->data=new_data;
    new_node->prev=NULL;
    struct node *temp;

    if((*head_ref)==NULL)
    {
        new_node->next=NULL;
        (*head_ref)=new_node;
    }
    else
    {
        new_node->next=*head_ref;
        (*head_ref)->prev=new_node;
        (*head_ref)=new_node;
    }
}
void deleteatspec(struct node**head_ref,int value)
{
    struct node* temp;
    temp=*head_ref;
    if(temp==NULL)
    {
        printf("Its empty");
    }
    else
    {
        while(temp->data!=value)
        {
            temp=temp->next;
        }
        temp->next->prev=temp->prev;
```

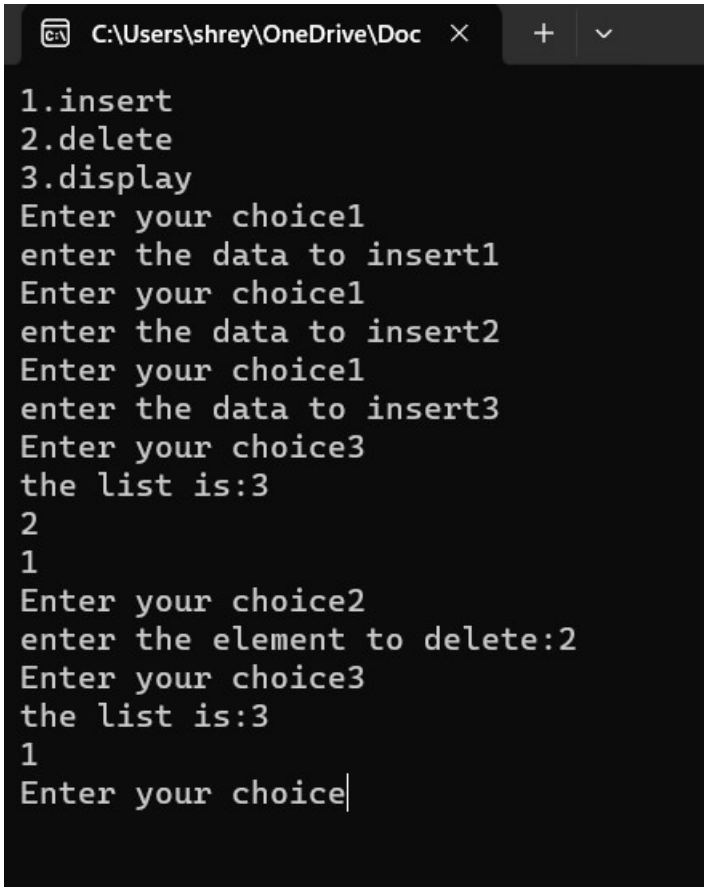
```
        temp->prev->next=temp->next;
        free(temp);
    }
}
void display(struct node**head_ref)
{
    if(*head_ref==NULL)
    {
        printf("The list is empty");
    }
    else
    {
        struct node*ptr;
        ptr=*head_ref;
        while(ptr!=NULL)
        {
            printf("%d\n",ptr->data);
            ptr=ptr->next;
        }
    }
}
 void main()
 {
     struct node *head=NULL;
     int ch;
     int n;
     printf("1.insert\n2.delete\n3.display\nEnter your choice\n");

     while(1){
           scanf("%d",&ch);
     switch(ch)
     {
         case 1:printf("enter the data to insert");
                scanf("%d",&n);
                insertatbeg(&head,n);
                break;

        case 2:printf("enter the element to delete:");
                scanf("%d",&n);
                deleteatspec(&head,n);
                break;

        case 3:printf("the list is:");
                display(&head);
                break;

        case 4:exit(0);
     }
     }
 }
```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1.insert
2.delete
3.display
Enter your choice1
enter the data to insert1
Enter your choice1
enter the data to insert2
Enter your choice1
enter the data to insert3
Enter your choice3
the list is:3
2
1
Enter your choice2
enter the element to delete:2
Enter your choice3
the list is:3
1
Enter your choice