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#include <stdio.h>
#include<stdlib.h>

struct lnode
{
    int data;
    struct node* next;
};

typedef struct lnode node;

node *front= NULL,*rear=NULL;

void enqueue(int val)
{
    node *newNode =(node*)malloc(sizeof(node));
    newNode->data=val;
    newNode->next=NULL;
    if(rear==NULL)
    {
        front=rear=newNode;
    }
    else
    {
        rear->next=newNode;
        rear=newNode;
    }
}

void dequeue()
{
    node *temp;
    if(front==NULL)
    {
        printf("Queue is empty...!");
        return;
    }
    else if(rear==front)
    {
        rear=front=NULL;
    }
    else
    {
        temp = front;
        front=front->next;
        free(temp);
    }
}

void display()
{
    node *i;
    if(front==NULL && rear ==NULL)
    {
        printf("\nQueue is empty...!");
    }

    else
    {
        printf("\nElements are:");
        node *i;
        for(i=front;i!=NULL;i=i->next)
        {
            printf("%d\t",i->data);
        }
    }
}

```

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}

int main() {
    int x,data;

    while(1)
    {
        printf("\nQueue operations\n1) Enqueue\n2) Dequeue\n3) Display\n4) Exit\nEnter the
Queue operations:");
        scanf("%d",&x);
        switch(x)
        {
            case 1:
                printf("Enter the inserting element:");
                scanf("%d",&data);
                enqueue(data);
                break;
            case 2:
                dequeue();
                break;
            case 3:
                display();
                break;
            case 4:
                printf("Exited...!");
                printf("\n-----");
                exit(0);
            default:
                printf("Invalid choice.Please enter 1 to 4");
                break;
        }
    }
}

```