

```

#include<stdio.h>
#include<stdlib.h>
struct Node
{
    int data;
    struct Node *next;
};
struct Node *front = NULL;
struct Node *rear = NULL;

void insert()
{
    struct Node *temp;
    int val;

    temp = (struct Node *) malloc (sizeof(struct Node));

    if(temp == NULL)
    {
        printf("\nQUEUE overflow\n");
        return;
    }
    else
    {
        printf("\nEnter value:");
        scanf("%d",&val);

        temp -> data = val;
        temp -> next = NULL;

        if(front == NULL)
        {
            front = rear = temp;
        }
        else
        {
            rear -> next = temp;
            rear = temp;
        }
        printf("\nOne value inserted into the QUEUE\n");
    }
}

void delete ()
{
    struct Node *temp;
    if(front == NULL)
    {
        printf("\nQUEUE underflow\n");
        return;
    }
    else
    {
        temp = front;
        front = front -> next;
        printf("\nThe value %d is deleted from QUEUE", temp->data);
    }
}

```

```

        free(temp);
    }
}

void display()
{
    struct Node *temp;
    temp = front;
    if(front == NULL)
    {
        printf("\nEmpty queue\n");
    }
    else
    {
        printf("\nQUEUE elements are:");
        while(temp != NULL)
        {
            printf("%d ", temp->data);
            temp = temp->next;
        }
    }
}

void main()
{
    int ch;
    int e = 1;

    printf("\nQUEUE using Linked List\n");
    while( e )
    {
        printf("\n-----MENU-----\n");
        printf("\n\t1. Insert\n\t2. Delete\n\t3. Display\n\t4. Exit\n");
        printf("\n-----\n");
        printf("Enter your choice:");
        scanf("%d", &ch);
        switch( ch )
        {
            case 1: insert();
                    break;
            case 2: delete();
                    break;
            case 3: display();
                    break;
            case 4: e = 0;
                    printf("\nExiting from the program\n");
                    break;
            default: printf("\nPlease enter valid choice\n");
        }
    }
}

```