

```

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

typedef struct queue {
    int data;
    struct queue * ptr;
}queue;

queue *front = NULL, *rear = NULL;

queue * createnode() {
    queue * newnode = (queue *)malloc(sizeof(queue));
    printf("Enter the data element : ");
    scanf("%d" , &newnode->data);
    newnode->ptr = NULL;
    return newnode;
}

void insert() {
    if(front == NULL) {
        front = createnode();
        rear = front;
    }
    else {
        queue * newnode = createnode();
        rear->ptr = newnode;
        rear = newnode;
    }
    printf("%d successfully inserted.\n" , rear->data);
}

void delete() {
    if (front == NULL)
        printf("Queue is empty.\n");
    else {
        printf("%d successfully deleted.\n" , front->data);
        queue * temp = front;
        front = front->ptr;
        free(temp);
    }
}

void display() {
    if (front == NULL)
        printf("Queue is empty.\n");
    else {
        queue * strt = front;
        printf("Elements of queue are : ");
        while(strt != NULL) {
            printf("%d ", strt->data);
            strt = strt->ptr;
        }
        printf("\n");
    }
}

```

```
void main() {
    int choice , flag = 1 ;
    printf("Queue using Singly Linked List.\n");
    printf("Enter the operation to be performed.\n");
    while(flag) {
        printf("1.Insert \t 2.Delete \t 3.Display \t 4.Exit  :
");
        scanf("%d" , &choice);
        switch(choice) {
            case 1 : insert();
                    break;

            case 2 : delete();
                    break;

            case 3 : display();
                    break;

            case 4 : flag = 0 ;
                    break;

            default : printf("Invalid input.\n");
                     break;
        }
    }
}
```