

```
/*INSERTION AND DELETION IN QUEUE USING LINKED LIST*/
```

```
#include<malloc.h>
```

```
#include<stdio.h>
```

```
struct NODE
```

```
{
```

```
    int data;
```

```
    struct NODE *next;
```

```
};
```

```
typedef struct NODE node;
```

```
node *start=NULL;
```

```
void insert()
```

```
{
```

```
    int value;
```

```
    node *temp, *p, *loc;
```

```
    p=(node *)malloc(sizeof(node));
```

```
    printf("ENTER DATA TO INSERT ");
```

```
    scanf("%d",&value);
```

```
    p->data=value;
```

```
    p->next=NULL;
```

```
    if(start==NULL)
```

```
        start=p;
```

```
    else
```

```
    {
```

```
        loc=start;
```

```
        while(loc->next!=NULL)
```

```

        loc=loc->next;

        loc->next=p;
    }
}

void del()
{
    node *p;

    if(start==NULL)

        printf("\nLINKED LIST IS EMPTY.");

    else
    {
        p=start;

        start=start->next;

        printf("\nTHE DELETED ELEMENT IS %d",p->data);

        free(p);
    }
}

void traverse()
{
    node*temp;

    temp=start;

    if(temp==NULL)

        printf("\nLINKED LIST IS EMPTY.");

    else
    {

```

```

        while(temp!=NULL)
        {
            printf("%d  ",temp->data);

            temp=temp->next;

        }
    }
}

void main()
{
    int ch;

    char cho;

    clrscr();

    printf("\t1.INSERT \t2.DELETE \t3.TRAVERSE\n");

    do
    {
        printf("Enter choice: ");

        scanf("%d",&ch);

        switch(ch)
        {

            case 1: insert();

                    break;

            case 2: del();

                    break;

            case 3: traverse();

                    break;

```

```
        default: printf("\nCASE NOT PRESENT");  
    }  
    fflush(stdin);  
    printf("\nWANT TO CONTINUE?(Y/N) ");  
    scanf("%c",&cho);  
}while(cho=='y' || cho=='Y');  
getch();  
}
```