

```
/******SUBHAS NATH*****  
/******  
/******PROGRAM OF LINKED QUEUE*****
```

```
#include<stdio.h>  
#include<conio.h>  
#include<stdlib.h>  
#define NULL 0
```

```
typedef struct link  
{  
    char info;  
    struct link *next;  
}node;
```

```
node *insert(node *,char);  
node *remove(node *);  
void display(node *);
```

```
void main()  
{  
    node *first=NULL;  
    char item;  
    int ch;  
    clrscr();
```

```
    printf("\n\t1) INSERT.\n\t2) REMOVE.\n\t3) EXIT.\n\n");  
    while(1)  
    {  
        printf("\nEnter your choice:- ");  
        scanf("%d",&ch);  
        switch(ch)  
        {
```

```
            case 1:  
                printf("\nEnter the item which you want to insert:- ");  
                fflush(stdin);  
                item=getchar();  
                first=insert(first,item);  
                display(first);  
                break;
```

```
            case 2:  
                first=remove(first);  
                display(first);  
                break;
```

```

        case 3:
            exit(0);
        }
    }
    getch();
}

```

/\*\*\*\*\*\*INSERT INT QUEUE\*\*\*\*\*\*/

```

node *insert(node *temp,char item)
{
    node *mid,*first;
    first=temp;
    mid=(node *)malloc(sizeof(node));
    mid->info=item;
    if(first==NULL)
    {
        temp=mid;
        mid->next=NULL;
    }
    else
    {
        while(first->next!=NULL)
        {
            first=first->next;
        }
        first->next=mid;
        mid->next=NULL;
    }
    return(temp);
}

```

/\*\*\*\*\*\*REMOVE FROM QUEUE\*\*\*\*\*\*/

```

node *remove(node *temp)
{
    node *first;
    first=temp;
    if(first==NULL)
    {
        printf("\n\tUNDREFLOW.\n");
    }
    else
    {
        printf("\n\n\t%c is deleted.\n",first->info);
    }
}

```

```
    first=first->next;
    free(temp);
    temp=first;
}
return(temp);
}
```

```
/******DISPLAY THE QUEUE******/
```

```
void display(node *temp)
{
    //node *first;
    //first=temp;
    printf("\n");
    while(temp!=NULL)
    {
        printf("%4c",temp->info);
        temp=temp->next;
    }
}
```