

## Queue Program using linked list

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

struct Node
{
    int data;
    struct Node *next;
}*front = NULL,*rear = NULL;

void insert(int);
void delete();
void display();
void main()
{
    int choice, value;
    //clrscr();
    printf("\n:: Queue Implementation using Linked List ::\n");
    while(1){
        printf("\n***** MENU *****\n");
        printf("1. Insert\n2. Delete\n3. Display\n4. Exit\n");
        printf("Enter your choice: ");
        scanf("%d",&choice);
        switch(choice){
            case 1: printf("Enter the value to be insert: ");
                    scanf("%d", &value);
                    insert(value);
                    break;
            case 2: delete(); break;
            case 3: display(); break;
```

```

        case 4: exit(0);

        default: printf("\nWrong selection!!! Please try again!!!\n");
    }
}

void insert(int value)
{
    struct Node *newNode;
    newNode = (struct Node*)malloc(sizeof(struct Node));
    newNode->data = value;
    newNode -> next = NULL;
    if(front == NULL)
        front = rear = newNode;
    else{
        rear -> next = newNode;
        rear = newNode;
    }
    printf("\nInsertion is Success!!!\n");
}

void delete()
{
    if(front == NULL)
        printf("\nQueue is Empty!!!\n");
    else{
        struct Node *temp = front;
        front = front -> next;
        printf("\nDeleted element: %d\n", temp->data);
        free(temp);
    }
}

void display()

```

```
{  
    if(front == NULL)  
        printf("\nQueue is Empty!!!\n");  
    else{  
        struct Node *temp = front;  
        while(temp->next != NULL){  
            printf("%d--->",temp->data);  
            temp = temp -> next;  
        }  
        printf("%d--->NULL\n",temp->data);  
    }  
}
```