LAB 8

Ajith M S
1BM19CS010

Queue using LL

```
#include <stdio.h>
#include <stdlib.h>
struct node
 {
 int data;
 struct node *next;
};
void insert();
void display();
 void del();
struct node *rear=NULL, *front=NULL;
int main()
 {
printf ("Queue Implementation using LL \n");
int choice;
do
{
printf ("1.create, 2.Display, 3.Delete. 4.Exit");
printf ("Enter your choice:");
scanf ("%d", &choice);
switch(choice)

 case 1: insert(); break;
 case 2: display(); break;
 case 3: del(); break;
```

```
} while (choice!=4);
}

void insert()
{
  struct node *newnode;
  newnode= (struct node*)malloc(sizeof (struct node));
  printf("Enter the element:\n");
  scanf("%d", &newnode->data);
  newnode->next = NULL;
  if (rear==NULL)
  {
    rear= newnode;
    front= newnode;
  }
  else
  {
    rear->next=newnode;
    rear=newnode;
  }

void del()
{
  if (front==NULL)
  {
    printf("Queue is empty\n"); return;
  }
  else
  {
    printf("Deleted element is %d", front->data);
    if (front==rear)
    {
      printf("Queue is empty\n");
      front=NULL; rear=NULL;
    }
    else
      front=front->next;
  }
```

```
void display ()
{
struct node *temp;
if (front == NULL)
{
printf("Queue empty");
return;
}
temp = front;
while (temp != NULL)
{ printf ("%d", temp->data);
temp = temp->next;
}
}
```