

```

#include <iostream>
using namespace std;

// Structure of Node.
struct Node
{
int data;

Node *link;
};

Node *front = NULL;
Node *rear = NULL;

//Function to check if queue is empty or not
bool isempty()
{
    if(front == NULL && rear == NULL)
        return true;
    else
        return false;
}

//function to enter elements in queue
void enqueue ( int value )
{
    Node *ptr = new Node();
    ptr->data= value;
    ptr->link = NULL;

    //If inserting the first element/node
    if( front == NULL )
    {
        front = ptr;
        rear = ptr;
    }
    else
    {
        rear ->link = ptr;
        rear = ptr;
    }
}

//function to delete/remove element from queue
void dequeue ( )
{
    if( isempty() )
        cout<<"Queue is empty\n";
    else
        //only one element/node in queue.
        if( front == rear)
        {
            free(front);
            front = rear = NULL;
        }
    else
    {
        Node *ptr = front;
        front = front->link;
        free(ptr);
    }
}

//function to show the element at front
void showfront( )
{
    if( isempty())
        cout<<"Queue is empty\n";
    else
        cout<<"element at front is:"<<front->data;
}

//function to display queue
void displayQueue()
{
    if (isempty())
        cout<<"Queue is empty\n";
    else
    {
        Node *ptr = front;
        while( ptr !=NULL)
        {
            cout<<ptr->data<<" ";
            ptr= ptr->link;
        }
    }
}

//Main Function
int main()
{
    int choice, flag=1, value;
    while( flag == 1)
    {
        cout<<"\n1.enqueue 2.dequeue 3.showfront 4.displayQueue 5.exit\n";
        cin>>choice;
        switch (choice)
        {
            case 1: cout<<"Enter Value:\n";
                    cin>>value;
                    enqueue(value);
                    break;
            case 2: dequeue();
                    break;
            case 3: showfront();
                    break;
            case 4: displayQueue();
                    break;
            case 5: flag = 0;
                    break;
        }
    }

    return 0;
}

```