

```

#include<iostream>

using namespace std;

#define max 5

int queue[max];

int front=-1;

int rear=-1;

void enqueue(int element)
{
    if((front== -1)&&(rear== -1))
    {
        front=0;

        rear=0;

        queue[rear]=element;
    }
    else if((rear+1)%max==front)
    {
        cout<<"Queue is overflow";
    }
    else
    {
        rear=(rear+1)%max;

        queue[rear]=element;
    }
}

void dequeue()
{
    if((front== -1)&&(rear== -1))
    {
        cout<<"Queue is underflow";
    }
    else if(front==rear)

```

```

{
    cout<<"\nDequeued element is"<<queue[front];
    front=-1;
    rear=-1;
}
else
{
    cout<<"\nDequeued element"<<queue[front];
    front=(front+1)%max;
}
}
void display()
{
    int i=front;
    if((front== -1)&&(rear== -1))
    {
        cout<<"Queue is empty";
    }
    else
    {
        cout<<"Elements in queue are";
        for(i=front;i!=rear;i=(i+1)%max)
        {
            cout<<queue[i]<<" ";
        }
        cout<<queue[i]<<" ";
    }
}
int main()
{
    int choice=1,x;

```

```
while(choice<4&&choice!=0)
{
    cout<<"\nPress 1:Insert element";
    cout<<"\nPress 2:Delete element";
    cout<<"\nPress 3:Display element";
    cout<<"\nEnter your choice";
    cin>>choice;
    switch(choice)
    {
        case 1:
        {
            cout<<"Enter element which is to be inserted";
            cin>>x;
            enqueue(x);
            break;
        }
        case 2:
        {
            dequeue();
            break;
        }
        case 3:
        {
            display();
        }
    }
}
return 0;
}
```