#include<iostream>

using namespace std;

class CircularQueue

{

int queue[30],front,rear,n;

public:

CircularQueue()

{

n=5;

front=-1;

rear=-1;

}

void enqueue(int data)

{

if(front==-1 && rear==-1)

{

front=rear=0;

queue[rear]=data;

}

else if((rear+1)%n==front)

{

cout<<"Queue is Full";

}

else

{

rear=(rear+1)%n;

queue[rear]=data;

}

}

void dequeue()

{

if (front==-1)

{

cout<<"Underflow";

}

else if(front==rear)

{

front=rear=-1;

}

else

{

cout<<"Deleted Element:"<<queue[front];

front=(front+1)%n;

}

}

void display()

{

int i=front;

while(i!=rear)

{

cout<<queue[i];

i=(i+1)%n;

}

cout<<queue[rear];

}

};

int main()

{

CircularQueue c;

int q,ch;

do

{

cout<<"\n1. Enqueue";

cout<<"\n2. Dequeue";

cout<<"\n3. Display";

cout<<"\n4. Exit";

cout<<"\n. Enter your choice";

cin>>ch;

switch(ch)

{

case 1: cout<<"\n Enter element in queue";

cin>>q;

c.enqueue(q);

break;

case 2:

c.dequeue();

break;

case 3:

c.display();

break;

}

}while(ch!=4);

}

OUTPUT:

1. Enqueue

2. Dequeue

3. Display

4. Exit

Enter your choice 1

Enter element in queue 35

1. Enqueue

2. Dequeue

3. Display

4. Exit

Enter your choice 1

Enter element in queue 34

1. Enqueue

2. Dequeue

3. Display

4. Exit

Enter your choice 1

Enter element in queue 38

1. Enqueue

2. Dequeue

3. Display

4. Exit

Enter your choice 2

Deleted Element:35

1. Enqueue

2. Dequeue

3. Display

4. Exit

Enter your choice 3

34 38

1. Enqueue

2. Dequeue

3. Display

4. Exit

Enter your choice 4