```c
#include<stdio.h>
#define N 5
int queue[N];
int front=-1;
int rear=-1;
void enqueue(int x)
{
    if(front==-1 && rear==-1)
    {
        front=rear=0;
        queue[rear]=x;
    }
    else if((rear+1)%N==front)
    {
        printf("Queue is full\n");
    }
    else{
        rear=(rear+1)%N;
        queue[rear]=x;
    }
}
void dequeue()
{

    if(front==-1 && rear==-1)
    {
        printf("Queue is empty\n");

    }
    else if(front==rear)
    {

        printf("Deleted element is :%d\n",queue[front]);

    }
    else
    {
```

```c
    }
    else
    {
        printf("Deleted element is:%d\n",queue[front]);
        front=(front+1)%N;
    }

void display()
{
    if(front==-1 && rear==-1)
    {
        printf("Queue is empty\n");
    }
    else{
            int i;
        printf("Queue elements are:\n");
        for ( i=front;i!=rear;i=(i+1)%N)
        {
            printf("%d  ",queue[i]);
        }
        printf(" %d",queue[i]);
    }

void peek()
{
    if(front==-1 &&rear==-1)
    {
        printf("Queue is empty\n");
    }
    else
    {
        printf("Front elements are :%d\n",queue[front]);
    }

int main()
```

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    }
    void peek()
    {
        if(front==-1 &&rear==-1)
        {
            printf("Queue is empty\n");
        }
        else
        {
            printf("Front elements are :%d\n",queue[front]);
        }
    }
    int main()
    {
        int choice,x;
        while(1)
        {
            printf("\n1.Enqueue 2.Dequeue 3.Display 4.peek\n");
            printf("Enter your choice");
            scanf("%d",&choice);
            switch(choice)
            {
                case 1:printf("Enter element to insert: ");
                        scanf("%d",&x);
                        enqueue(x);
                        break;
                case 2: dequeue();break;
                case 3:display();break;
                case 4:peek();break;
                case 5:printf("Existing....\n");exit(0);break;
                default:printf("INvalid choice");
            }
        }
        return 0;
    }
```

```
1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice1
Enter element to insert: 10

1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice1
Enter element to insert: 20

1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice1
Enter element to insert: 30

1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice3
Queue elements are:
10  20   30
1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice4
Front elements are :10

1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice2
Deleted element is:10

1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice 1
Enter element to insert: 40

1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice1
Enter element to insert: 50

1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice1
Enter element to insert: 60

1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice1
Enter element to insert: 70
Queue is full

1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice3
Queue elements are:
20  30  40  50   60
1.Enqueue 2.Dequeue 3.Display 4.peek
Enter your choice5
Existing....
```