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## LAB-5

### Circular Queue Implementation.

Pseudocode

A[SIZE]

FRONT = -1

REAR = -1

Is Full()

```
{  
    if (front == (rear + 1) % N)  
        return True  
    else  
        return False  
}
```

Is Empty()

```
{  
    if (front == -1 && rear == -1)  
        return True  
    else  
        return False  
}
```

Enqueue(x)

{ if (IsFull())

    printf ("Q is Full")

else if (IsEmpty())

    front ← rear ← 0

else

    rear ← (rear + 1) % N

A(rear) = x

}

Dequeue()

{

if (IsEmpty())

    printf ("Q is Empty")

else if (front == rear)

    x ← A[front]

    front ← rear ← 1

else

{ x ← A[front]

    front ← (front + 1) % N

}

return x