

## LAB 5

A[SIZE]

FRONT = -1

REAR = -1

Is-Full()

{

if (front == (front + 1) % N)

return True

else

return False

}

Is-Empty()

{

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

return True

else

return False

Enqueue (x)

{

if (isFull())

print ("Q is Full")

else if (is Empty())

front  $\leftarrow$  rear  $\leftarrow$  0

else

rear  $\leftarrow$  (rear + 1) % N

A[rear] = x

}

Dequeue ()

{

if (isEmpty())

printf ("Q is Empty")

else if (front == rear)

x  $\leftarrow$  A[front]

front  $\leftarrow$  rear  $\leftarrow$  -1

else

{ x  $\leftarrow$  A[front]

front  $\leftarrow$  (front + 1) % N

}

return x }