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Q) WAP to show implementation of circular queue.

Ans:

```
int A [SIZE]
front ← -1
rear ← -1

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

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

Enqueue ()
{ If (IsFull ())
    printf ("Queue is Full")
  else if (IsEmpty ())
    { front ← read ← 0
    }
  else
    { rear ← (rear+1) % N
    }
  A[rear] ← x
}
```

```
Dequeue()
{ if (IsEmpty())
      printf ("Queue is Empty")
  else if (front == rear)
      { front ← rear ← -1
      }
  else
      { front ← (front+1) %- N
      }
}
```

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