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LAB-4 : QUEUE IMPLEMENTATION

Q. WAP to simulate the working of a queue of integers using an array. Provide the following operations:
a) Insert.
b) Delete.
c) Display.
The program should print appropriate messages for queue empty and queue overflow conditions.

A. Create a Queue Q of size MAX
front and rear → -1.

```
insert(x)
{
  if (rear == MAX-1)
      Queue Overflow !!!
  else
      if (front == -1) front = 0;
  rear = rear + 1;
  Q[rear] = x
}
delete()
{
  if (front == -1 || front > rear)
      Queue Underflow !!!
  else
      print Q[front]
      front = front + 1
  if (front > rear) {
      front = -1
      rear = -1
  }
```

```
display ()
{   int i
    if front(==-1)
        print" Q is empty!"
    else
    {
        for(i=front ; i<=rear ; i++)
            print Q[i]
    }
```
