Programming Assignment 9-3

For this problem, you will implement a queue of `ints`, using an array in the background. To start, initialize an array and two pointers (front and rear) in your queue class as follows:

```java
private int[] arr = new int[10];
private int front = -1;
private int rear = -1;
```

`Front` is the position of first element in the queue, and `rear` is the position of last element in the queue. When adding an element to the queue, you add the element to position `rear+1`. When removing an element from the queue, you remove the element in the position pointed to by the variable `front`.

Implement all of the methods declared below so that your class behaves as a queue. The methods to be implemented are: `isEmpty`, `size`, `enqueue`, `dequeue`, and `peek`.

Notes:
1. Your queue must support unlimited `enqueue` operations. This means that you will need to incorporate a procedure for resizing the background array periodically.
2. You don't need to implement it as a circular queue. When the rear hits the end of the array, you can start resizing the array.