

```
/*--- Queue.java ---*/
/**
 * This represents a queue
 * It can add to the back
 * And remove from the front
 */
public class Queue {

    private Node head;
    private Node tail;
    /**
     * This is Node that stores some data and
     * a "next" which points to the next Node in line
     */
    private class Node {
        public String data;
        public Node next;
        public Node(String d, Node n) {
            data = d;
            next = n;
        }
        public Node(String d) {
            data = d;
        }
    }

    /**
     * adds s to the back of the queue
     */
    public void enqueue(String s) {
        Node n = new Node(s);
        if (this.head == null) this.head = n;
        if (this.tail != null) this.tail.next = n;
        this.tail = n;
    }

    /**
     * removes and returns string from the front of the queue
     */
    public String dequeue() {
        String out = this.head.data;
        this.head = this.head.next;
        return out;
    }

    /**
     * returns true if the queue is empty
     * otherwise false
     */
    public boolean empty() {
        return (this.head == null);
    }
}
```