

```

package datastructure;

public class QueueLinkedList {
    Node front, rear;

    public QueueLinkedList() {
        this.front = null;
        this.rear = null;
    }

    void enqueue(int key) {
        Node temp = new Node(key);
        if (this.rear == null) {
            this.front = this.rear = temp;
            return;
        }
        this.rear.next = temp;
        this.rear = temp;
    }

    Node dequeue() {
        if (this.front == null)
            return null;
        Node temp = this.front;
        this.front = this.front.next;
        if (this.front == null)
            this.rear = null;
        return temp;
    }
}

```

```
}
```

```
public static void printList(QueueLinkedList list) {
```

```
    Node currentNode = list.front;
```

```
    System.out.print("Linked List Elements: ");
```

```
    while (currentNode != null) {
```

```
        System.out.print(currentNode.data + " ");
```

```
        currentNode = currentNode.next;
```

```
    }
```

```
    System.out.println();
```

```
}
```

```
public static void main(String[] args) {
```

```
    QueueLinkedList q = new QueueLinkedList();
```

```
    q.enqueue(1);
```

```
    q.enqueue(2);
```

```
    q.enqueue(3);
```

```
    printList(q);
```

```
    System.out.println("Dequeued item is " + q.dequeue().data);
```

```
    printList(q);
```

```
}
```

```
}
```