

```
package programmingIILap;
import java.util.Queue; // Import Queue
interface
import java.util.LinkedList; // Import
LinkedList class to implement Queue

public class MyQueueApp {
    public static void main(String[]
args) {
        // Create a Queue using
LinkedList
        Queue<Integer> q = new
LinkedList<Integer>();

        // Print statement indicating
that elements will be added to the queue
        System.out.println("Add 5
elements to queue...");

        // Add elements to the queue
q.add(10); // Add first element
q.add(20); // Add second element
q.add(30); // Add third element
q.add(40); // Add fourth element
q.add(50); // Add fifth element

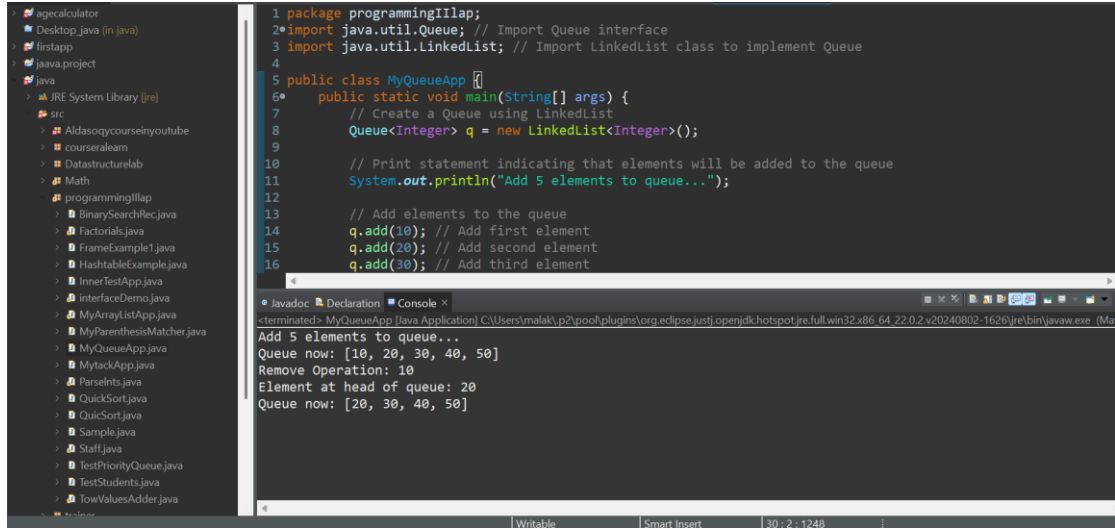
        // Print the current state of the
queue
        System.out.println("Queue now: "
+ q);

        // Print statement indicating a
remove operation will be performed
        System.out.println("Remove
Operation: " + q.remove()); // Remove and
display the front element

        // Print the current state of the
queue after removal
        System.out.println("Element at
head of queue: " + q.peek()); // Display
the new front element
        System.out.println("Queue now: "
+ q); // Print the updated queue
    }
}
```

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The screenshot shows an IDE with a project explorer on the left and a code editor on the right. The project explorer lists a package named 'programmingIILap' containing several Java files, including 'MyQueueApp.java'. The code editor displays the source code for 'MyQueueApp.java', which implements a queue using a linked list. The code includes imports for 'Queue' and 'LinkedList', a static 'main' method that creates a 'LinkedList' queue, adds three elements (10, 20, 30), and prints the queue's state. The console window at the bottom shows the execution output, including the initial state of the queue, the removal of the first element (10), and the final state of the queue after adding more elements.

```
1 package programmingIILap;
2 import java.util.Queue; // Import Queue interface
3 import java.util.LinkedList; // Import LinkedList class to implement Queue
4
5 public class MyQueueApp {
6     public static void main(String[] args) {
7         // Create a Queue using LinkedList
8         Queue<Integer> q = new LinkedList<Integer>();
9
10        // Print statement indicating that elements will be added to the queue
11        System.out.println("Add 5 elements to queue...");
12
13        // Add elements to the queue
14        q.add(10); // Add first element
15        q.add(20); // Add second element
16        q.add(30); // Add third element
17    }
18 }
```

terminated> MyQueueApp [Java Application] C:\Users\malak\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.22.0.2\jre\bin\java.exe [M...]

Add 5 elements to queue...

Queue now: [10, 20, 30, 40, 50]

Remove Operation: 10

Element at head of queue: 20

Queue now: [20, 30, 40, 50]