

9. Write a program in Java to insert and remove elements in a queue

```
import java.util.Queue;
import java.util.LinkedList;

public class QueueExample {
    public static void main(String[] args) {
        // Create a queue
        Queue<String> queue = new LinkedList<>();

        // Insert elements into the queue
        queue.offer("Apple");
        queue.offer("Banana");
        queue.offer("Cherry");

        System.out.println("Initial Queue: " + queue);

        // Remove elements from the queue
        String removedElement = queue.poll();
        System.out.println("Removed Element: " + removedElement);
        System.out.println("Queue after removal: " + queue);

        // Insert a new element
        queue.offer("Durian");
        System.out.println("Queue after insertion: " + queue);
    }
}
```

OUTPUT:

Initial Queue: [Apple, Banana, Cherry]

Removed Element: Apple

Queue after removal: [Banana, Cherry]

Queue after insertion: [Banana, Cherry, Durian]