```java
package Practice;

import java.util.Arrays;

public class LongestIncreasingSubsequence {

    public static int longestIncreasingSubsequence(int[] nums) {
        int n = nums.length;
        if (n == 0) {
            return 0;
        }

        int[] lis = new int[n];
        Arrays.fill(lis, 1);

        for (int i = 1; i < n; i++) {
            for (int j = 0; j < i; j++) {
                if (nums[i] > nums[j] && lis[i] < lis[j] + 1) {
                    lis[i] = lis[j] + 1;
                }
            }
        }

        int maxLength = Arrays.stream(lis).max().orElse(1);
        return maxLength;
    }

    public static void main(String[] args) {
        int[] nums = {15, 22, 9, 33, 23, 50, 31, 65, 83};
        int result = longestIncreasingSubsequence(nums);
        System.out.println("Length of Longest Increasing Subsequence: " + result);
    }
}
```