

```

1
2 import components.stack.Stack;
3
4 /**
5  * {@code Queue} represented as a {@code Sequence} of entries, with
6  * implementations of primary methods.
7  *
8  * @param <T>
9  *         type of {@code Queue} entries
10 * @correspondence this = $this.entries
11 */
12 public class HelloWorld {
13
14     /**
15      * Shifts entries between {@code leftStack} and {@code
16      * rightStack}, keeping
17      * reverse of the former concatenated with the latter fixed,
18      * and resulting
19      * in length of the former equal to {@code newLeftLength}.
20      *
21      * @param <T>
22      *         type of {@code Stack} entries
23      * @param leftStack
24      *         the left {@code Stack}
25      * @param rightStack
26      *         the right {@code Stack}
27      * @param newLeftLength
28      *         desired new length of {@code leftStack}
29      * @updates leftStack, rightStack
30      * @requires <pre>
31      * 0 <= newLeftLength and
32      * newLeftLength <= |leftStack| + |rightStack|
33      * </pre>
34      * @ensures <pre>
35      * rev(leftStack) * rightStack = rev(#leftStack) * #rightStack
36      * and
37      * |leftStack| = newLeftLength
38      * </pre>
39      */
40     private static <T> void setLengthOfLeftStack(Stack<T>
41 leftStack,
42 Stack<T> rightStack, int newLeftLength) {
43         int numToTransfer = Math.abs(newLeftLength -
44         leftStack.length());

```

```
40         if (newLeftLength < leftStack.length()) {
41             for (int i = 0; i < numToTransfer; i++) {
42                 T x = rightStack.pop();
43                 leftStack.push(x);
44             }
45         } else if (newLeftLength > leftStack.length()) {
46             for (int i = 0; i < numToTransfer; i++) {
47                 T x = leftStack.pop();
48                 rightStack.push(x);
49             }
50         }
51     }
52 }
53 }
```