

## Homework 7

```
/**
 * Shifts entries between {@code leftStack} and {@code rightStack},
keeping
 * reverse of the former concatenated with the latter fixed, and
resulting
 * in length of the former equal to {@code newLeftLength}.
 *
 * @param <T>
 *     type of {@code Stack} entries
 * @param leftStack
 *     the left {@code Stack}
 * @param rightStack
 *     the right {@code Stack}
 * @param newLeftLength
 *     desired new length of {@code leftStack}
 * @updates leftStack, rightStack
 * @requires <pre>
 * 0 <= newLeftLength and
 * newLeftLength <= |leftStack| + |rightStack|
 * </pre>
 * @ensures <pre>
 * rev(leftStack) * rightStack = rev(#leftStack) * #rightStack and
 * |leftStack| = newLeftLength
 * </pre>
 */
private static <T> void setLengthOfLeftStack(Stack<T> leftStack,
    Stack<T> rightStack, int newLeftLength) {
    assert rightStack != null : "Violation of: rightStack is not null";
    assert leftStack != null : "Violation of: leftStack is not null";
    assert 0 <= newLeftLength : "Violation of: 0 <= newLeftLength";
    assert newLeftLength <= leftStack.length() + rightStack.length() : ""
        + "Violation of: newLeftLength <= |leftStack| +
|rightStack|";

    while (leftStack.length() <= newLeftLength && rightStack.length() >
0) {
        leftStack.push(rightStack.pop());
    }
    while (leftStack.length() > newLeftLength) {
        rightStack.push(leftStack.pop());
    }
}
```