

SimplePalindrome.java

```
1 package examples;
2
3 public class SimplePalindrome {
4
5     /**
6      * Returns true if the input string is a palindrome
7      * (reads the same backwards and forwards)
8      *
9      * For example the string "aba" is a palindrome.
10     * The string "abc" is not because abc backwards is cba
11     *
12     * Spaces are not considered special in this palindrome.
13     * See sentence for a more complex palindrome problem.
14     *
15     * @param input
16     * @return
17     */
18     public static boolean isPalindrome(String input) {
19         if(input.length() <= 1)
20             return true;
21         if(input.charAt(0) != input.charAt(input.length() -1)) {
22             return false;
23         }
24         return isPalindrome(input.substring(1, input.length()-1));
25     }
26
27     /**
28      * Returns true if the input array is a palindrome.
29      *
30      * For example, the array {1,2,1} is a palindrome.
31      * The array {1,2,3} is not.
32      *
33      * This problem is much easier with the use of
34      * a helper method.
35      *
36      * @param input
37      * @return
38      */
39     public static boolean isPalindromeIntArray(int[] input) {
40         return isPalindromeIntArrayHelper(input, 0, input.length - 1);
41     }
42
43     public static boolean isPalindromeIntArrayHelper(int[] input, int leftPosition, int
rightPosition) {
44         if(leftPosition >= rightPosition)
45             return true;
46         if(input[leftPosition] != input[rightPosition])
47             return false;
48         return isPalindromeIntArrayHelper(input, leftPosition + 1, rightPosition - 1);
49     }
50
51 }
52
```