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CS 401
Test Cases Screenshots
Homework 3

The test cases were automated using Junit. The test report was printed automatically in the test class.

#### Test cases and result for combine:

```
Test case 1: Combine two words
Inputs: input1 = "Hello", input2 = "World"
Expected Output: "HelloWorld"
Actual Output: "HelloWorld"
Result: Test PASSED
-----
Test case 2: Combine two empty strings
Inputs: input1 = "", input2 = ""
Expected Output: ""
Actual Output: ""
Result: Test PASSED
Test case 3: Combine word with empty string
Inputs: input1 = "Test", input2 = ""
Expected Output: "Test"
Actual Output: "Test"
Result: Test PASSED
Test case 4: Combine empty string with word
Inputs: input1 = "", input2 = "Case"
Expected Output: "Case"
Actual Output: "Case"
Result: Test PASSED
______
Test case 5: Combine two numbers as strings
Inputs: input1 = "123", input2 = "456"
Expected Output: "123456"
Actual Output: "123456"
Result: Test PASSED
-----
Test case 6: Combine long strings
Result: Test PASSED
Test case 7: Combine strings with special characters
Inputs: input1 = "!@#", input2 = "$%^"
Expected Output: "!@#$%^"
Actual Output: "!@#$%^"
Result: Test PASSED
-----
Test case 8: Combine strings with spaces
Inputs: input1 = "Hello ", input2 = " World"
Expected Output: "Hello World"
Actual Output: "Hello World"
Result: Test PASSED
```

#### Test cases and result for reverse:

```
Test case 9: Reverse a word
Inputs: input1 = "Hello", input2 = "null"
Expected Output: "olleH"
Actual Output: "olleH"
Result: Test PASSED
_____
Test case 10: Reverse an empty string
Inputs: input1 = "", input2 = "null"
Expected Output: ""
Actual Output: ""
Result: Test PASSED
______
Test case 11: Reverse a single character
Inputs: input1 = "a", input2 = "null"
Expected Output: "a"
Actual Output: "a"
Result: Test PASSED
_____
Test case 12: Reverse a string of numbers
Inputs: input1 = "12345", input2 = "null"
Expected Output: "54321"
Actual Output: "54321"
Result: Test PASSED
______
Test case 13: Reverse a phrase with space
Inputs: input1 = "Test Case", input2 = "null"
Expected Output: "esaC tseT"
Actual Output: "esaC tseT"
Result: Test PASSED
-----
Test case 14: Reverse a long string
Expected Output: "aaaaaaaaaaaaaaaaa"
Actual Output: "aaaaaaaaaaaaaaaaa"
Result: Test PASSED
_____
Test case 15: Reverse a string with special characters
Inputs: input1 = "!@# $%^", input2 = "null"
Expected Output: "^%$ #@!"
Actual Output: "^%$ #@!"
Result: Test PASSED
_____
Test case 16: Reverse a palindrome
Inputs: input1 = "madam", input2 = "null"
Expected Output: "madam"
Actual Output: "madam"
Result: Test PASSED
```

## Test cases and result for upperCase:

```
Test case 17: Convert lowercase to uppercase
Inputs: input1 = "hello", input2 = "null"
Expected Output: "HELLO"
Actual Output: "HELLO"
Result: Test PASSED
-----
Test case 18: Convert empty string to uppercase
Inputs: input1 = "", input2 = "null"
Expected Output: ""
Actual Output: ""
Result: Test PASSED
_____
Test case 19: Convert already uppercase string
Inputs: input1 = "ALREADY UPPER", input2 = "null"
Expected Output: "ALREADY UPPER"
Actual Output: "ALREADY UPPER"
Result: Test PASSED
Test case 20: Convert mixed case to uppercase
Inputs: input1 = "MixEd CaSe", input2 = "null"
Expected Output: "MIXED CASE"
Actual Output: "MIXED CASE"
Result: Test PASSED
_____
Test case 21: Convert alphanumeric to uppercase
Inputs: input1 = "123abc", input2 = "null"
Expected Output: "123ABC"
Actual Output: "123ABC"
Result: Test PASSED
Test case 22: Convert string with special characters to uppercase
Inputs: input1 = "!@# abc", input2 = "null"
Expected Output: "!@# ABC"
Actual Output: "!@# ABC"
Result: Test PASSED
_____
Test case 23: Convert long lowercase string to uppercase
Expected Output: "AAAAAAAAAAAAAAAAAAAAA"
Actual Output: "AAAAAAAAAAAAAAAAAAAA"
Result: Test PASSED
Test case 24: Convert mixed case with spaces to uppercase
Inputs: input1 = "Mix Ed CaSe", input2 = "null"
Expected Output: "MIX ED CASE"
Actual Output: "MIX ED CASE"
Result: Test PASSED
```

## Test cases and result for trimWhitespace:

```
Test case 25: Trim whitespace from both ends
Inputs: input1 = " Hello World! ", input2 = "null"
Expected Output: "Hello World!"
Actual Output: "Hello World!"
Result: Test PASSED
_____
Test case 26: Trim whitespace from both ends of a word
Inputs: input1 = " Spaces ", input2 = "null"
Expected Output: "Spaces"
Actual Output: "Spaces"
Result: Test PASSED
-----
Test case 27: Trim string with no whitespace
Inputs: input1 = "NoSpaces", input2 = "null"
Expected Output: "NoSpaces"
Actual Output: "NoSpaces"
Result: Test PASSED
Test case 28: Trim string with only whitespaces
Expected Output: ""
Actual Output: ""
Result: Test PASSED
-----
Test case 29: Trim string with multiple internal spaces
Inputs: input1 = " Multiple Spaces ", input2 = "null"
Expected Output: "Multiple Spaces"
Actual Output: "Multiple Spaces"
Result: Test PASSED
-----
Test case 30: Trim long string with whitespaces
Inputs: input1 = "
                                                         ", input2 = "null"
                                  Text
Expected Output: "Text"
Actual Output: "Text"
Result: Test PASSED
_____
Test case 31: Trim string with newline characters
Inputs: input1 = "
       Hello
", input2 = "null"
Expected Output: "Hello"
Actual Output: "Hello"
Result: Test PASSED
______
Test case 32: Trim string with mixed whitespace characters
Inputs: input1 = "
                       Mixed
 ", input2 = "null"
Expected Output: "Mixed"
Actual Output: "Mixed"
Result: Test PASSED
```

# Test Summary and multi method tests:

```
Test case 33: Combine and reverse
Inputs: input1 = "Hello", input2 = "World"
Expected Output: "dlroWolleH"
Actual Output: "dlroWolleH"
Result: Test PASSED
-----
Test case 34: Combine, reverse, and uppercase
Inputs: input1 = "Hello", input2 = "World"
Expected Output: "DLROWOLLEH"
Actual Output: "DLROWOLLEH"
Result: Test PASSED
_____
Test case 35: Combine, trim, and uppercase
Inputs: input1 = " Hello", input2 = "World "
Expected Output: "HELLOWORLD"
Actual Output: "HELLOWORLD"
Result: Test PASSED
Test case 36: Combine, reverse, and trim
Inputs: input1 = " Hello", input2 = "World "
Expected Output: "dlroWolleH"
Actual Output: "dlroWolleH"
Result: Test PASSED
_____
Total test cases run: 36
Number of cases passed: 36
Number of cases failed: 0
              81
Finished after 0.05 seconds
                                 82⊜
                                       @BeforeClass
Runs: 36/36 ■ Errors: 0

■ Failures: 0

                                 83
                                       public static void setUp
                                 84
                                           System.out.println(":
> StringUtilsTest [Runner: JUnit 5] (0.010 s)
                                            System.out.println("
                                 85
                                 86
                                           totalTestCases = 0;
                                           failedCaseNumber = 0
                                 87
                                           passedCaseNumber = 0
                                 88
                                 89
                                       }
                                 90
                                 91∘
                                       @Before
                                       public void setUp() {
                                 92
                                 93
                                           totalTestCases++;
```