

```
1 import static org.junit.Assert.assertEquals;
2
3 import org.junit.Test;
4
5 import components.set.Set;
6 import components.set.Set1L;
7 import components.simplereader.SimpleReader;
8 import components.simplereader.SimpleReader1L;
9 import components.simplewriter.SimpleWriter;
10 import components.simplewriter.SimpleWriter1L;
11
12 /**
13  *
14  * @author ansh pachauri
15  *
16  */
17 public class StringReassemblyTest {
18
19     /**
20      * test of combination.
21      */
22
23     @Test
24     public void testCombination0() {
25         String str1 = "abcd";
26         String str2 = "cdefghi";
27         int overlap = 2;
28         String result = StringReassembly.combination(str1,
29 str2, overlap);
30         assertEquals("abcdefghi", result);
31     }
32
33     /**
34      * test of combination.
35      */
36
37     @Test
38     public void testCombination1() {
39         String str1 = "abcdefghi";
40         String str2 = "cdefghijklmnopqrst";
```

```
39         int overlap = 7;
40         String result = StringReassembly.combination(str1,
41 str2, overlap);
42         assertEquals("abcdefghijklmnopqrst", result);
43     }
44     /**
45      * test of combination.
46      */
47     @Test
48     public void testCombination2() {
49         String str1 = "abcd";
50         String str2 = "abcd";
51         int overlap = 4;
52         String result = StringReassembly.combination(str1,
53 str2, overlap);
54         assertEquals("abcd", result);
55     }
56     /**
57      * test of addToSetAvoidingSubstrings.
58      */
59
60     @Test
61     public void testAddToSetAvoidingSubstrings0() {
62         Set<String> strSet = new Set1L<String>();
63         strSet.add("Hey");
64         strSet.add("How are you?");
65         strSet.add("I am good");
66         Set<String> check = new Set1L<String>();
67         check.add("Hey");
68         check.add("How are you?");
69         check.add("I am good");
70         String str = "good";
71         StringReassembly.addToSetAvoidingSubstrings(strSet,
72 str);
73         assertEquals(check, strSet);
74     }
```

```
75     /**
76      * test of addToSetAvoidingSubstrings.
77      */
78     @Test
79     public void testAddToSetAvoidingSubstrings1() {
80         Set<String> strSet = new Set1L<String>();
81         strSet.add("Hey");
82         strSet.add("How are you?");
83         strSet.add("I am good");
84         Set<String> check = new Set1L<String>();
85         check.add("Hey");
86         check.add("How are you?");
87         check.add("I am good");
88         check.add("Nathan");
89         String str = "Nathan";
90         StringReassembly.addToSetAvoidingSubstrings(strSet,
91 str);
92         assertEquals(check, strSet);
93     }
94     /**
95      * test of addToSetAvoidingSubstrings.
96      */
97     @Test
98     public void testAddToSetAvoidingSubstrings2() {
99         Set<String> strSet = new Set1L<String>();
100        strSet.add("Hey");
101        strSet.add("How are you?");
102        strSet.add("I am good, Nathaniel");
103        Set<String> check = new Set1L<String>();
104        check.add("Hey");
105        check.add("How are you?");
106        check.add("I am good, Nathaniel");
107        String str = "Nathan";
108        StringReassembly.addToSetAvoidingSubstrings(strSet,
109 str);
110        assertEquals(check, strSet);
111    }
```

```
112    /**
113     * test of addToSetAvoidingSubstrings.
114     */
115    @Test
116    public void testAddToSetAvoidingSubstrings3() {
117        Set<String> strSet = new Set1L<String>();
118        strSet.add("Hey");
119        strSet.add("How are you?");
120        strSet.add("I am good");
121        Set<String> check = new Set1L<String>();
122        check.add("Hey");
123        check.add("How are you?");
124        check.add("I am good Nathan");
125        String str = "I am good Nathan";
126        StringReassembly.addToSetAvoidingSubstrings(strSet,
127        str);
128        assertEquals(check, strSet);
129    }
130    /**
131     * test of linesFromInput.
132     */
133    @Test
134    public void testLinesFromInput0() {
135        String fileName = "testFile";
136        SimpleWriter fileOut = new SimpleWriter1L(fileName);
137        SimpleReader input = new SimpleReader1L(fileName);
138        String str = "abcdefgh";
139        fileOut.print(str);
140        Set<String> check = new Set1L<>();
141        check.add("abcdefgh");
142
143        Set<String> result =
144        StringReassembly.linesFromInput(input);
145        assertEquals(check, result);
146    }
147
148    /**
```

```
149     * test of linesFromInput.
150     */
151     @Test
152     public void testLinesFromInput1() {
153         String fileName = "testFile";
154         SimpleWriter fileOut = new SimpleWriter1L(fileName);
155         SimpleReader input = new SimpleReader1L(fileName);
156         String str = "a\nb\nc\ndefgh";
157         fileOut.print(str);
158         Set<String> check = new Set1L<>();
159         check.add("a");
160         check.add("b");
161         check.add("c");
162         check.add("defgh");
163
164         Set<String> result =
StringReassembly.linesFromInput(input);
165
166         assertEquals(check, result);
167     }
168
169     /**
170     * test of linesFromInput.
171     */
172     @Test
173     public void testLinesFromInput2() {
174         String fileName = "testFile";
175         SimpleWriter fileOut = new SimpleWriter1L(fileName);
176         SimpleReader input = new SimpleReader1L(fileName);
177         String str = "a\nb\nc\nd\ne\nf\ng";
178         fileOut.print(str);
179         Set<String> check = new Set1L<>();
180         check.add("a");
181         check.add("b");
182         check.add("c");
183         check.add("d");
184         check.add("e");
185         check.add("f");
186         check.add("g");
```

```
187
188     Set<String> result =
StringReassembly.linesFromInput(input);
189
190     assertEquals(check, result);
191 }
192
193 /**
194  * test of printWithLineSeparators.
195  */
196 @Test
197 public void printWithLineSeparators0() {
198
199     String fileName = "testFile";
200     SimpleWriter fileOut = new SimpleWriter1L(fileName);
201     SimpleReader input = new SimpleReader1L(fileName);
202     String str = "abcdefg";
203     String check = "abcdefg";
204     StringReassembly.printWithLineSeparators(str, fileOut);
205     String str1 = "";
206     while (!input.atEOS()) {
207         str1 += input.nextLine();
208         if (!input.atEOS()) {
209             str1 += "\n";
210         }
211     }
212     assertEquals(check, str1);
213 }
214
215 /**
216  * test of printWithLineSeparators.
217  */
218 @Test
219 public void printWithLineSeparators1() {
220
221     String fileName = "testFile";
222     SimpleWriter fileOut = new SimpleWriter1L(fileName);
223     SimpleReader input = new SimpleReader1L(fileName);
224     String str = "a~b~c~d~e~f~g";
```

```
225     String check = "a\\nb\\nc\\nd\\ne\\nf\\ng";
226     StringReassembly.printWithLineSeparators(str, fileOut);
227     String str1 = "";
228     while (!input.atEOS()) {
229         str1 += input.nextLine();
230         if (!input.atEOS()) {
231             str1 += "\\n";
232         }
233     }
234     assertEquals(check, str1);
235 }
236
237 /**
238  * test of printWithLineSeparators.
239  */
240 @Test
241 public void printWithLineSeparators2() {
242
243     String fileName = "testFile";
244     SimpleWriter fileOut = new SimpleWriter1L(fileName);
245     SimpleReader input = new SimpleReader1L(fileName);
246     String str = "a~b~c~~~defg";
247     String check = "a\\nb\\nc\\n\\n\\ndefg";
248     StringReassembly.printWithLineSeparators(str, fileOut);
249     String str1 = "";
250     while (!input.atEOS()) {
251         str1 += input.nextLine();
252         if (!input.atEOS()) {
253             str1 += "\\n";
254         }
255     }
256     assertEquals(check, str1);
257 }
258
259 }
260
```