```
1 import static org. junit Assert assertEquals
3 import org.junit.Test;
5import components.set.Set;
6import components.set.Set1L;
7import components.simplewriter.SimpleWriter;
8 import components.simplewriter.SimpleWriter1L;
10 public class StringReassemblyTest {
11
12
      private static Set String createFromArgs String args) {
13
          Set<String> set = new Set1L<String>();
14
          for (String s : args)
15
16
17
          return set;
18
19
20
      /**
21
      * Routine test of combination.
22
23
      @Test
24
      public void Combination1(
25
          String str1 = "HelloWorld";
          String str2 = "World";
26
27
          int overlap = 5
28
29
          String result = StringReassembly.combination(str1, str2, overlap);
30
          assertEquals("HelloWorld", result);
31
32
      /**
33
      * challenging test of combination, long strings
34
35
36
      @Test
37
      public void Combination2()
          String str1 = "icantwaituntil"
38
          String str2 = "untiligraduate";
39
40
          int overlap = 5
41
          String result = StringReassembly.combination(str1, str2, overlap);
42
          assertEquals("icantwaituntiligraduate", result);
43
44
      /**
45
      * challenge test of combination. both strings are the same
46
47
       */
48
      @Test
49
      public void Combination3
50
          String str1 = "food"
51
          String str2 = "food";
52
          int overlap = 4
53
          String result = StringReassembly.combination(str1, str2, overlap);
54
          assertEquals("food", result);
55
56
      /**
57
```

```
58
        * border test of combination. both strings are empty.
 59
        */
 60
       @Test
 61
       public void Combination4() {
           String str1 = ""
 62
           String str2 = ""
 63
 64
           int overlap = 0;
 65
           String result = StringReassembly.combination(str1, str2, overlap);
           assertEquals("", result);
 66
 67
 68
       /**
 69
 70
        * border test of combination. one string is empty.
 71
       */
 72
       @Test
 73
       public void Combination5() {
 74
           String str1 = "blob";
           String str2 = ""
 75
 76
           int overlap = 0;
 77
           String result = StringReassembly.combination(str1, str2, overlap);
 78
           assertEquals("blob", result);
 79
 80
       /**
 81
       * border test of combination. one character strings.
 82
       */
 83
 84
       @Test
 85
       public void Combination6() {
 86
           String str1 = "m"
 87
           String str2 = "e";
 88
           int overlap = 0;
 89
           String result = StringReassembly.combination(str1, str2, overlap);
           assertEquals("me", result);
 90
 91
 92
       /**
 93
 94
       * routine test of combination. one overlap
 95
       */
 96
       @Test
 97
       public void Combination7() {
98
           String str1 = "mee";
           String str2 = "ep";
99
100
           int overlap = 1;
101
           String result = StringReassembly.combination(str1, str2, overlap);
102
           assertEquals("meep", result);
103
104
105
       @Test
106
       // boundary, empty strings
107
       public void addToSetAvoidingSubstrings1() {
108
           Set<String> set = createFromArgs(
           String str = "";
109
           Set<String> expected = createFromArgs("");
110
111
112
           StringReassembly.addToSetAvoidingSubstrings(set, str);
113
114
           assertEquals(expected, set);
```

```
115
116
117
       @Test
118
       // boundary, one empty string one with content
119
       public void addToSetAvoidingSubstrings2
120
           Set<String> set = createFromArgs();
           String str = "hello world";
121
122
           Set<String> expected = createFromArgs("hello world");
123
124
           StringReassembly addToSetAvoidingSubstrings(set, str);
125
           //System.out.print(set);
126
           assertEquals(expected, set);
127
128
129
       @Test
130
       // boundary, no overlap and small units
131
       public void addToSetAvoidingSubstrings3
132
           Set<String> set = createFromArgs("i");
           String str = "s":
133
134
           Set<String> expected = createFromArgs("s", "i");
135
136
           StringReassembly addToSetAvoidingSubstrings(set, str);
137
           // System.out.print(set);
138
           assertEquals(expected, set);
139
140
141
       @Test
142
       // routine, both have content and overlap
143
       public void addToSetAvoidingSubstrings4
144
           Set<String> set = createFromArgs("he");
           String str = "ell"
145
           Set<String> expected = createFromArgs("ell", "he");
146
147
148
           StringReassembly addToSetAvoidingSubstrings (set, str):
149
           //System.out.print(set);
150
           assertEquals(expected, set);
151
152
153
154
       // routine, one is a substring
155
       public void addToSetAvoidingSubstrings5
           Set<String> set = createFromArgs("i can fly");
156
           String str = "fly"
157
158
           Set<String> expected = createFromArgs("i can fly");
159
160
           StringReassembly addToSetAvoidingSubstrings(set, str);
161
           //System.out.print(set);
162
           assertEquals(expected, set);
163
164
       @Test
165
       // boundary, string contains all "~", should end up empty
166
167
       public void printWithLineSeparators1
           SimpleWriter out = new SimpleWriter1L();
168
169
           String str = "~~~~"
170
171
           StringReassembly printWithLineSeparators(str, out);
```

```
172
         //if output is empty, test passed
173
174
175
176
      @Test
     // routine, normal functioning
177
    public void printWithLineSeparators2(
178
179
          SimpleWriter out = new SimpleWriter1L();
180
181
          String str = "~bob~":
182
          StringReassembly.printWithLineSeparators(str, out);
183
          String check = "bob";
184
         //if output == check, test passed
185
186
187
     @Test
188
189
      // boundary, empty string
     public void printWithLineSeparators3() {
190
191
          SimpleWriter out = new SimpleWriter1L();
192
          String str = "";
193
194
          StringReassembly.printWithLineSeparators(str, out);
195
196
          //if output is empty, test passed
197
198
199
      @Test
200
      // challenging, string contains all "~", long string, should end up empty
201
     public void printWithLineSeparators4
202
          SimpleWriter out = new SimpleWriter1L();
203
          204
          StringReassembly.printWithLineSeparators(str, out);
205
206
207
          //if output is empty, test passed
208
209
```