```java
1 /**
2  * @author Luis Hung
3  * @since 2-19-2022
4  * @version 3.0 Description: This assignment is suppose to calculate
5  * the area,semi-perimeter and hypotenuse of the triangle. When
6  * completing the project I struggle when there are errors and fixing
7  * it.For example when I tried running one of my projects it would
8  * have an error saying it couldn't load main file or something like that
9  * and I would create a new project for it to work.I believe that the
10  * template given for birthdays helped a lot. The template basically
11  * guided me on what to do and without it I would've forgotten a lot
12  * of things.
13  */
14 package assignment1v3;
15
16 import java.io.PrintStream;
17 import java.util.Scanner;
18
19 public class Assignment1v3 {
20
21     public static void main(String[] args) throws Exception {
22         double length, width, hypotenuse, semiperimeter, area;
23
24         Scanner sc = new Scanner(System.in);
25         PrintStream ps = new PrintStream("printout.txt");
26
27         promptUser();
28
29         length = sc.nextDouble();
30         while (length > 0) {
31             width = sc.nextDouble();
32
33             hypotenuse = Math.sqrt((length * length) + (width * width));
34             semiperimeter = ((length + width + hypotenuse) / 2);
35             area = Math.sqrt(semiperimeter * (semiperimeter - length)
36                 * (semiperimeter - width) * (semiperimeter - hypotenuse));
37
38             System.out.printf("When length is %.1f and width is %.0f the "
39                     + "hypotenus is %.2f while the semiperimeter is %.2f "
40                     + " and the area is %.2f%n%n",
41                     length, width, hypotenuse, semiperimeter, area);
```

```
42
43            ps.printf("When length is %.1f and width is %.0f the "
44                    + "hypotenus is %.2f while the semiperimeter is %.2f "
45                    + " and the area is %.2f%n%n",
46                    length, width, hypotenuse, semiperimeter, area);
47          // I struggled trying to print the output into a file and I
48          //realized my mistake of putting ps.printf instead of
49          //ps.println.
50
51          // I included the semiperimeter answer for the output because
52          //when I removed it the area would be incorrect
53          // and the answer for my area would be the semiperimeter
54          promptUser();
55
56          length = sc.nextDouble();
57        }
58      }
59
60    public static void promptUser() {
61        System.out.println("Please enter length and width");
62        System.out.println("Enter two zeros to stop");
63
64    }
65 }
```