```java
 1  package com.publicept;
 2
 3  public class Main {
 4
 5      public static void main(String[] args) {
 6
 7          int result = 1 + 2;
 8          System.out.println("1 + 2 = " + result); // 1 + 2 = 3
 9
10          int previousResult = result;
11          System.out.println("previous result = " + previousResult); // previous result = 3
12
13          result = result - 1;
14          System.out.println("3 - 1 = " + result); // 3 - 1 = 2
15
16          result = result * 10;
17          System.out.println("2 * 10 = " + result); // 2 * 10 = 20
18
19          result = result / 5;
20          System.out.println("20 / 5 = " + result); // 20 / 5 = 4
21
22          result = result % 3;                      // remainder / modulus / modulo
23          System.out.println("4 % 3 = " + result); // 4 % 3 = 1
24
25          // result = result + 1
26          result++;
27          System.out.println("1++ = " + result); // 1++ = 2
28
29          result--;
30          System.out.println("2-- = " + result); // 2-- = 1
31
32          //result = result + 2;
33          result += 2;
34          System.out.println("1 += 2 = " + result); // 1 += 2 = 3
35
36          // result = result * 10
37          result *= 10;
38          System.out.println("3 *= 10 = " + result); // 3 *= 10 = 30
39
40          // result = result / 3
41          result /= 3;
42          System.out.println("30 /= 3 = " + result); // 30 /= 3 = 10
43
44          // result = result - 2
45          result -= 2;
46          System.out.println("10 -= 2 = " + result); // 10 -= 2 = 8
47
48          boolean isAlien = false;
49          if (isAlien == false) {
50              System.out.println("It is not an alien!");         // It is not an alien!
51              System.out.println("And I am scared of aliens!"); // And I am scared of aliens!
52          }
53
54          int topScore = 80;
55          if (topScore >= 100) {
56              System.out.println("You got the high score!"); // no output
57          }
58
59          int secondTopScore = 60;
60          if (topScore > secondTopScore && topScore < 100) {
61              // output yes: Greater than second top score and top score is less then 100.
62              System.out.println("Greater than second top score and top score is less then 100.");
63
64          }
65
66          if ((topScore > 90) || (secondTopScore <= 90)){
67              // output yes: Either or both of the conditions are true.
68              System.out.println("Either or both of the conditions are true.");
69          }
70
71          int newValue = 50;
72          if (newValue == 50) {
73              System.out.println("This is true"); // output yes: This is true
74          }
75
76          boolean isCar = false;
77          if (!isCar) {
78              System.out.println("This is not supposed to happen"); // output yes: This is not supposed to happen
79          }
80
81
82          /**
83           * Ternary Operator
84           * = shortcut of if-then-else
85           */
86          int ageOfClient = 20;
87          // read: is ageOfClient >= 20 ? then it's true, else it's false.
88          boolean isEighteenOrOver = (ageOfClient) >= 20 ? true : false;
89          System.out.println("Is the Client is 18 or over? " + isEighteenOrOver); // Is the Client is 18 or over? true
90
91
92          /**
93           * Double Operators Challenge
94           */
95          double myFirstDoubleValue = 20.00d;
96          double mySecondDoubleValue = 80.01d;
97
```

```java
 98            double myValuesTotal = (myFirstDoubleValue + mySecondDoubleValue) * 100.00d;
 99            System.out.println("(20.00d + 80.01d) * 100.00d = " + myValuesTotal); // (20.00d + 80.01d) * 100.00d = 10001.0
100
101            double myRemainder = myValuesTotal % 40d;
102            System.out.println("The modulus is: " + myRemainder); // The modulus is: 1.0
103
104
105            /**
106             * Remainder Challenge
107             */
108  //          boolean isNoRemainder;
109  //          if (myRemainder == 0) {
110  //              isNoRemainder = true;
111  //          } else {
112  //              isNoRemainder = false;
113  //          }
114
115            boolean isNoRemainder = (myRemainder == 0) ? true : false;
116            System.out.println("Is the modulus Zero: " + isNoRemainder);
117            if (!isNoRemainder) {
118                System.out.println("Got some remainder.");          // Got some remainder.
119            } else {
120                System.out.println("The modulus is actually Zero."); // skipped
121            }
122        }
123 }
124
```