

# ExpressionDemo.java

```

1 package class5;
2
3 public class ExpressionDemo {
4
5     public static void main(String[] args) {
6         int operandOne = 18;
7         int operandTwo = 7;
8         double operandThree = 18;
9         double operandFour = 7;
10
11         // basic math operators
12         System.out.println("----- BASIC MATH OPERATORS
-----");
13         System.out.println(operandOne + operandTwo);
14         System.out.println(operandOne - operandTwo);
15         System.out.println(operandOne * operandTwo);
16         System.out.println(operandOne / operandTwo);
17         System.out.println(operandOne % operandTwo);
18         System.out.println(operandThree / operandFour);
19
20         // math with string concatenation
21         System.out.println("----- MATH WITH STRING CONCATENATION
-----");
22         System.out.println("18 + 7 = " + operandOne + operandTwo); // wrong
23         System.out.println("18 + 7 = " + (operandOne + operandTwo)); // correct
24
25         // counting
26         System.out.println("----- COUNTING -----");
27         int counter = 0;
28         counter = counter + 1;
29         System.out.println(counter);
30         counter += 1;
31         System.out.println(counter);
32         System.out.println(counter++);
33         System.out.println(++counter);
34         System.out.println(counter);
35
36         // data conversions
37         System.out.println("----- DATA CONVERSIONS -----");
38         int operandFive = 16;
39         int operandSix = 8;
40         double resultOne = operandFive + operandSix; // widening
41         System.out.println(resultOne);
42         double operandSeven = 16.2;
43         double operandEight = 8.4;
44         int resultTwo = (int)operandSeven + (int)operandEight; // narrowing
45         System.out.println(resultTwo);
46         String operandNine = "16";
47         String operandTen = "8";
48         int resultThree = Integer.valueOf(operandNine) + Integer.valueOf(operandTen); //
parsing
49         System.out.println(resultThree);
50
51     } // end main
52
53 } // end ExpressionsDemo

```