What kind of Operation?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Operator | 1st Operand | 2nd Operand | Operation | Example | Result |
| + | int | int | Integer Addition | 4 + 3 | 7 |
| + | double | double | Double  Addition | 3.4 + 2.0 | 5.4 |
| + | int | double | Double  Addition | 4 + 2.0 | 6.0 |
| + | double | int | Double [[1]](#footnote-1)Addition | 4.1 + 2 | 6.1 |
| + | String | String | String Concatenation | “alpha” + “bet” | “alphabet” |
| + | String | int | String Concatenation | “alpha” + 4 | “alpha4” |
| + | int[[2]](#footnote-2) | String | String Concatenation | 4 + “bet” | “4bet” |
| / | int | int | Integer  Division | 4/3 | 1 |
| 2/3 | 0 |
| / | double | double | Double  Division | 2.0/3.0 | 0.6667 |
| / | int | double | Double  Division | 2/3.0 | 0.6667 |
| / | double | int | Double  Division | 2.0/3 | 0.6667 |
| %[[3]](#footnote-3) | int | int | Integer Division  Remainder | 5%3 | 2 |
| % | -int | int | Integer Division  Remainder | -5%3 | -2 |
| % | int | -int | Integer Division  Remainder | 5%-3 | 2 |
| % | -int | -int | Integer Division  Remainder | -5%-3 | -2 |

1. Multiplication, Subtraction and Addition follow the same set of rules. [↑](#footnote-ref-1)
2. The same thing happens if it is a double instead of an int. [↑](#footnote-ref-2)
3. Modulus Operator or Remainder works in Java for both integer and double types – but let’s stick with integer only. [↑](#footnote-ref-3)