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2.5: Assignments and Operators Worksheet

This is an individual worksheet where you will be investigating the various operators which are available within Python when working with variables. For each item, enter the suggested code and assess the output. What do you think is happening? You may have to change the values to assess what is happening when the operators are used.

You might want to create a new file within your PyCharm project to contain the example code so that you can assess what the operators are doing. Start with the following two variables:

num\_a = 15

num\_b = 2

Complete the following table. You will need to print num\_c or num\_a (depending on the operator) to see the output

| **Operator Name** | **Operator** | **Example Code** | **Example Output** | **Description of Operator** |
| --- | --- | --- | --- | --- |
| Addition | + | num\_c = num\_a + num\_b | 17 | Add both the numbers |
| Subtraction | - | num\_c = num\_a - num\_b | 13 | Subtracts num\_b from num\_a |
| Division | / | num\_c = num\_a / num\_b | 7.5 | Divides num\_a by num\_b |
| Floor | // | num\_c = num\_a // num\_b | 7 | Rounds the result down |
| Modulo | % | num\_c = num\_a % num\_b | 1 | Remainder of the division |
| Multiplication | \* | num\_c = num\_a \* num\_b | 30 | Multiplies both the numbers by each other |
| Exponentiate | \*\* | num\_c = num\_a \*\* num\_b | 225 | Exponentiates num\_a to the power of num\_b |
| Add and equal to | += | num\_a += num\_b | 17 | Add and equal to number b |
| Subtract and equal to | -= | num\_a -= num\_b | 13 | Subtract and equal to |
| Divide and equal to | /= | num\_a /= num\_b | 7.5 (stored in num\_a) | Divide and equal to |
| Floor and equal to | //= | num\_a //= num\_b | 7 (stored in num\_a) | Floored and equal to |
| Modulo and equal to | %= | num\_a %= num\_b | 1 (stored in num\_a) | Modulo and equal to |
| Multiply and equal to | \*= | num\_a \*= num\_b | 30 (stored in num\_a) | Multipled and equal to to num\_a |
| Expotentiate | \*\*= | num\_a \*\*= num\_b | 225 (stored in num\_a) | 225 and equal to num\_a |