

Week 1 Evaluation, Variables and Turtle

In this exercise, try to come up with the answer without using IDLE/Python first. Then type the expressions into IDLE to verify your answers. The objective is for you to understand why and how they work.

Part 1 Arithmetic Evaluation

| Code | Output |
|-------------------------|--------|
| <code>3 * 4 + 5</code> | |
| <code>3 + 4 * 5</code> | |
| <code>5 ** 3 % 4</code> | |
| <code>97 / 4</code> | |
| <code>97 // 4</code> | |

Part 2 Logical Evaluation

| Code | Output |
|-----------------------------|--------|
| <code>3 + 2 == 1 + 4</code> | |
| <code>4 > 4</code> | |
| <code>True or False</code> | |
| <code>not False</code> | |
| <code>not not True</code> | |
| <code>not 0</code> | |
| <code>not 9999</code> | |

Part 3 String Evaluation

| Code | Output |
|---------------------------------------|--------|
| 'abc' + 'def' | |
| 'gala' * 3 | |
| 'mu' + 'ha' * 4 | |
| ('ba '*2+'bidu'*2+'bi ' + 'jam '*2)*3 | |
| 'banana'[3] | |
| 'banana'[2:4] | |

Part 4 Operator Precedence

| Code | Output |
|-------------------|--------|
| 1 + 2 * 3 | |
| 1 + 2 * 3 **4 | |
| 1 + 2 * 3 **4 - 5 | |
| not 0 + 1 | |

Part 5 Turtle Graphics

You can draw pictures with the ***turtle*** package in Python. Try out the following commands and guess what they will do.

```
>>> from turtle import *
>>> fd(100)
>>> rt(90)
>>> fd(100)
>>> rt(90)
>>> fd(100)
>>> rt(90)
>>> fd(100)
>>>
```