

Week 4 - Python 1 - Coding Dojo

Introduction to Arithmetic and Variables

All done in immediate mode

Simple Arithmetic

```
>>> 1+2
3
>>> 3*4
12
>>> 1+3*7
22
>>> (1+3)*7
28
>>> 7+5
12
>>> 7-15
-8
>>> 3*10
30
```

Something Python can't understand

```
>>> 3x10
SyntaxError: invalid syntax
```

The thorny issue of whether division is real or integer Maths

```
>>> 10/3
3
>>> 10.0/3.0
3.3333333333333335
```

How to do exponentiation?

```
>>> 2^5
7 (bitwise XOR)
>>> 2**5
32
```

Remainder:

```
>>> 6 % 4
>>> 2
```

Introducing Variables

```
>>> a=10
>>> a
10
>>> a=12
>>> a
```

```
12
>>> a*17
204
>>> a/5
2
>>> a=12.0
>>> a/5
2.4
>>>
```

Variable names

1. Start with letter or _
2. Case sensitive