“Python is an experiment in how much freedom programmers need. Too much freedom and nobody can read another's code; too little and expressiveness is endangered.”

- Guido van Rossum
Scope of Python

• Science
  - Bioinformatics
• System Administration
  - Unix
  - Web logic
  - Web sphere
• Web Application Development
  - CGI
  - Jython – Servlets
• Testing scripts
Math

Rule: If you want Python to answer in floats, you have to talk to it in floats.

More operators:

divide: /
multiply: *

>>> print 3 * 12 36
>>> print 12 / 3 4
>>> print 11 / 3 3
>>> print 12.0 / 3.0 4.0
>>> print 11.0 / 3.0 3.66
VARIABLES IN PYTHON
List: a sequence of objects

```python
>>> Beatles = ["John", "Paul", "George", "Ringo"]
>>> grades = [82, 93, 67, 99, 100]
```

Guess what this will output:

```python
>>> type(Beatles)
>>> type(grades)
```
TUPLE: DATA TYPE
<table>
<thead>
<tr>
<th>Statement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>if statements</td>
<td>An if statement consists of a boolean expression followed by one or more statements.</td>
</tr>
<tr>
<td>if...else statements</td>
<td>An if statement can be followed by an optional else statement, which executes when the boolean expression is FALSE.</td>
</tr>
<tr>
<td>nested if statements</td>
<td>You can use one if or else if statement inside another if or else if statement(s).</td>
</tr>
</tbody>
</table>