

Introduction to Python code

Discover

Python is a language that computers understand (a programming language).
 A set of lines written in a programming language is called code, basically it's a plain text file.

Writing code gives you the ability to control the computer in more powerful ways than just a keyboard and mouse through the desktop.

Learn

On the Desktop there are three Python icons: IDLE 3, IDLE and Python Games. Open IDLE.
 This "Python Shell" lets you easily run single python commands, eg. `>>> print "Hello"`

But to write several lines, a file is easier. "File" → "New Window". In the new window type:
`print "Hello"`
`print "How are you?"`
 Then to Run "Run" → "Run Module". (you will need to save, and fix any errors before it can run).

Apply

Calculations	For-Loop	Time	For-Loop in a For-Loop
<pre>i = 0 print i i = i + 1 print i</pre>	<pre>for i in range(0,5): print i #cmnt # this is a comment</pre>	<pre>import time for i in range(0,5): print i time.sleep(1) print "done"</pre>	<pre>print "x", "y" for x in range(0,3): for y in range(0,3): print x, y</pre>

Modify some of the above code to understand how it works.
 Eg. Do some other calculations. Change the numbers in the ranges.

The variable "i" is used for no particular reason. Depending on the purpose, you could name it something else, eg "count", "score". Whatever makes sense for how it is used.

Teach

Share what calculations you can make it do. What is the hash symbol (#) useful for?
 Share your finding regarding the first and second numbers in "range".

Discover

MC2-Scripting: Modify the MineCraft world with python code.