

## MineCraft Python Scripts

### Discover

Control the MineCraft world with Python scripts. Imagine changing many parts of the world by running just one script. Build a giant tower or a long bridge with valuable blocks.

### Learn

After following MC2-Python, you will have a hello.py file.

Make a new file with a different name in the same directory, and copy the contents.

Alternately open hello.py with IDLE, then “File” → “Save As...”

### Apply

#### Getting position

Instead of posting hello to chat, try posting the position of the MineCraft character.

```
pos = mc.player.getPos() # assign to pos the result of player, getPos, function
mc.postToChat(pos)      # post to chat the variable, pos.
```

Return to the MineCraft window and you should see 3 decimal numbers separated by commas.

These 3 numbers correspond to the three axes x, y, z. Where y is vertical with upwards as positive.

**Setting Position:** Teleport 10 blocks up in the world with “mc.player.setPos(pos.x, pos.y+10, pos.z)”

**Setting Blocks:** “mc.setBlock(pos.x+1, pos.y, pos.z, block.GRASS)” Look inside block.py for all types

**Split Tower:** (“for” loops from PY2-Intro)

```
for h in range(3, 6):
    mc.setBlock(pos.x, pos.y + h, pos.z, block.COBBLESTONE)
for h in range(7, 10):
    mc.setBlock(pos.x, pos.y + h, pos.z, block.SANDSTONE)
```

**Lawn:**

```
for w in range (-5, 5):
    for d in range (-5, 5):
        mc.setBlock(pos.x+d, pos.y-1, pos.z+w, block.GRASS)
```

### Teach

Modify and share the code above, on your own or with others, to build interesting things in the world.

### Discover

Flick through the following pdf, and try out some of the examples:

<http://arghbox.files.wordpress.com/2013/06/teacheredition.pdf> (open in Midori)