# Python Minecraft

The code that I used came from: <https://github.com/fogleman/Minecraft>

And that I believe came from: <https://github.com/boskee/Minecraft>

The code was written for Python 2.7, but I hacked it to work in Python 3.5, and I had to fix a few glitches. I made it so that my kids could enter a very simple python file, and the main code would load it in easily. That way they wouldn’t have to see the main part of the code.

The files are:

* **Minecraft.py** is the main code that generates the world.
* **MyCode\*.py** are example code that kids can use.
* **texture.png** is the images of the faces of the cubes.
* **mazetest.py** is a standalone proof of concept to generate a maze. I tried various different things until I got something that worked for me.
* **\*.pyproj and \*.sln** are Visual Studio files. I use Python Tools for Visual Studio to run and debug python code. It’s my favorite IDE and Atom is my favorite editor. You can ignore them if you use something else; e.g. IDLE.

To run the code, you will need to install Python 3.5 or higher and install the pyglet module; e.g.

pip install piglet

Then you should be able to run the code:

python Minecraft.py [filename]

Use the keys and mouse to get around; see below.

I have added these new key commands:

* L = load the filename and run it.
* C = clear the board; reset it.
* H = Teleport back to the origin (0,0,0).
* M = Make random hills and terrain.

I have created some sample files that can be loaded in. They all begin with “MyCode”. The easiest is MyCodeBrickPylons.py, which builds a square around you with brick pylons. To run it:

python Minecraft.py MyCodeBrickPylons.py

Then hit “L” to load it in.

One nice feature is that you can edit the MyCode file while the Minecraft main program is running, save the file, then hit “C” to clear and “L” to load it back in. Else, you can quit the program and rerun the command. You still have to hit “L” to load it in. I could have loaded the code on startup, but this way gives you a chance to move somewhere first, and then load it.

# The Bricks

You have grass, sand, brick and stone as your only cubes. It looks like six below, but the ones with grass and dirt are merely different faces of the grass cube. Stone cannot be created or destroyed with the mouse buttons.

# Coordinates

Minecraft coordinates have Y going up, whereas traditionally it’s Z.



