Minecraft & Python

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1) Read through the getting started information.
2) Start running Idle for Python3 and Minecraft.
3) `printPositionOnce.py` – load and run the program. Then move the player and rerun the program.
4) `addBlockOnce.py` – load and run the program. Then change the block type and rerun the program.

Challenge : raining sand

- Create `SAND` blocks above the player in several places.
- Hint – copy and paste the `setBlock` function call several times with different coordinates.

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5) `printPosition.py` – load and run the program. Try moving the player around. This program contains a while loop and a sleep statement. Try changing the value in the sleep statement and rerun it.

Challenge : chasing blocks

- Write a program that continues to create blocks where the player is.
- Hint – use a `while` loop.

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6) `createTriangle.py` – load and run the program. Try changing the size of the triangle, by altering the `setBlocks` function call and changing the limits of the `for` loop.

Challenge : lighthouse

- Write a program to build a lighthouse.
- The lighthouse should have black and white layers of blocks.
- Use the `setBlocks` function to create each layer
- Hint – use a `for` loop.

Challenge : castle

- Write a program to create a castle.
- The castle should have four square towers and four solid walls between the towers.
- Try drawing the castle and adding the axes before writing the program.

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7) `checkPosition.py` – load and run the program. Try walking over next to the pilar. Then move away again.

Challenge : trapped

- Choose a trap area. When a player steps into the selected x-z plane, encase them in SAND.

Challenge : volcano

- Print a message on the chat display to warn the player a volcano is about to appear.
- Create a volcano using the LAVA brick.
- Create the LAVA volume in stages, with `time.sleep()` function calls in between.

At the end of the class, blow up the world using TNT. Place a large amount of TNT, with one active block. Then smash the active block.

The full Python application programming interface for Minecraft is described at:
http://www.stuffaboutcode.com/p/minecraft-api-reference.html