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Minecraft

API

Alice in Wonderland

Minecraft

API

Look Who's Talking

Minecraft

API

Forbidden Planet

Minecraft

Begin at the Beginning. Installing Minecraft

```
Click the icon for LXTerminal to open a new terminal window.
wget 'https://s3.amazonaws.com/assets.minecraft.net/pi
/minecraft-pi-0.1.1.tar.gz'
```

To decompress it:

```
tar -zxvf minecraft-pi-0.1.1.tar.gz
```

To run it:

```
cd mcpi
./minecraft-pi
```

Python scripts for controlling Minecraft Pi Edition on Raspberry Pi, found at mcpipy.com: `https://github.com/brooksc/mcpipy`
Parts taken from Craig Richardson's Minecraft Pi Book: `http://arghbox.wordpress.com/`

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Finding the Player continuously

```
import mcpi.minecraft as minecraft
from time import sleep
mc = minecraft.Minecraft.create()
while True:
    pos = mc.player.getPos()
    x = pos.x
    y = pos.y
    z = pos.z
    mc.postToChat("x=%i, y=%i, z=%i" % (x,y,z))
    sleep(1)
```

Writing to the console

```
import mcpi.minecraft as minecraft
mc = minecraft.Minecraft.create()
message = raw_input("Write here to chat:")
mc.postToChat(message)
```

Where am I?

```
import mcpi.minecraft as minecraft
mc = minecraft.Minecraft.create()
pos = mc.player.getPos()
x = pos.x
y = pos.y
z = pos.z
mc.postToChat("x=%i, y=%i, z=%i" % (x,y,z))
```

API

Goldfinger

Minecraft

API

Field of Dreams

Minecraft

API

Star Trek

Minecraft

API

Raiders of the Lost Ark

Minecraft

Placing a block

```
import mcpi.minecraft as minecraft
import mcpi.block as block
mc = minecraft.Minecraft.create()
pos = mc.player.getTilePos()
mc.setBlock(pos.x, pos.y + 4, pos.z, block.DIAMOND_BLOCK)
mc.postToChat("Look above you")
```

Flatten the planet

```
import mcpi.minecraft as minecraft
import mcpi.block as block
mc = minecraft.Minecraft.create()
mc.setBlocks(-128,0,-128,128,64,128,block.AIR)# Air above
mc.setBlocks(-128,0,-128,128,-1,128,block.WATER)# Water below
mc.postToChat("Waterworld in 5 minutes. Take a break.")
```

Midas Touch

```
import mcpi.minecraft as minecraft
import mcpi.block as block
mc = minecraft.Minecraft.create()
from time import sleep
water = 9 # Declare a variable
air = 0 # Declare a variable
while True:
    pos = mc.player.getTilePos()
    blockBelow = mc.getBlock(pos.x, pos.y - 1, pos.z)
    if blockBelow != air and blockBelow != water:
        mc.setBlock(pos.x, pos.y - 1, pos.z, block.GOLD_BLOCK)
    else:
        mc.postToChat("Not placing block. Over water or air")
        sleep(1)
    sleep(0.1)
```

Pyramid

```
import mcpi.minecraft as minecraft
import mcpi.block as block
mc = minecraft.Minecraft.create()
[x,y,z] = mc.player.getTilePos()
# Set some variables to customize your pyramid
height   =  4
level  =  1
# Execute the loop, building from the top down
while level <= height:
       mc.setBlocks( x - level, height - level, z - level,
                     x + level, height - level, z + level,
                         block.TNT )
       level  =  level + 0.5;
# Put the player on top of the pyramid!
mc.player.setPos( x, height, z )
```

Big Jump

```
import mcpi.minecraft as minecraft
import mcpi.block as block
mc = minecraft.Minecraft.create()
pos = mc.player.getTilePos()
mc.player.setPos(pos.x,pos.y+10, pos.z)
```

Teleport

```
import mcpi.minecraft as minecraft
import mcpi.block as block
mc = minecraft.Minecraft.create()
mc.player.setTilePos(10,5,30)
```

API

Flash Gordon

Minecraft

API

A New Hope

Minecraft

API

The Towering Inferno

Minecraft

API

The Italian Job

Minecraft

That's no Moon

```
import mcpi.minecraft as minecraft
import mcpi.block as block
mc = minecraft.Minecraft.create()
pos = mc.player.getPos()
radius = 6
for x in range(-(radius),radius):
    for y in range(-(radius), radius):
        for z in range(-(radius),radius):
            if x**2 + y**2 + z**2 < radius**2:
                mc.setBlock(pos.x + x - radius -10 , pos.y + y +
                    radius, pos.z -
 z , block.COBBLESTONE)
```

Raining Rocks

```
import mcpi.minecraft as minecraft
import mcpi.block as block
import random
from time import sleep
mc = minecraft.Minecraft.create()
while True: #Will keep running until Cntrl-C pressed
    randomx = random.randint(-127, 127) # Random number between
        -127 and 127
    randomz = random.randint(-127, 127) # Random number between
        -127 and 127
    randomy = mc.getHeight(randomx, randomz)
    randomy += 20
    mc.setBlock(randomx, randomy, randomz, block.GRAVEL)
    sleep(0.1)
```

TNT Block

```
import mcpi.minecraft as minecraft
import mcpi.block as block
mc = minecraft.Minecraft.create()
pos = mc.player.getTilePos()
mc.setBlock(pos.x + 4, pos.y, pos.z , block.WOOL.id, 13) #Green
mc.setBlock(pos.x + 4, pos.y , pos.z + 1 , block.WOOL.id, 0)
    #White
mc.setBlock(pos.x + 4, pos.y , pos.z + 2 , block.WOOL.id, 14)
    #Red
mc.setBlock(pos.x + 4, pos.y + 1, pos.z + 1, block.TNT.id, 1) #
#Block is armed.
mc.postToChat("Hit the TNT, then run.")
```

Tower with Lava on top

```
import mcpi.minecraft as minecraft
import mcpi.block as block
mc = minecraft.Minecraft.create()
side_length = 4
height = side_length + 20
pos = mc.player.getPos()
#mc.setBlocks(pos.x + height, pos.y, pos.z, pos.x +
    side_length, pos.y + height, pos.z + side_length ,
    block.STONE_BRICK)
mc.setBlocks(pos.x + height, pos.y, pos.z, pos.x +
    side_length, pos.y + height, pos.z + side_length ,
    block.GLOWING_OBSIDIAN)
# If you want Lava remove the comment (#) from the line below
#mc.setBlocks(pos.x + height, pos.y + height + 1, pos.z, pos.x
    + side_length, pos.y + height + 1, pos.z + side_length ,
    block.LAVA)
```