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from microbit import *

volume_list = [0, 0, 0, 0, 0] //we will store the incoming values in this list
password_list = [0, 1, 0, 0, 1] //this is the secret access code
pin0.set_analog_period(20)
pin0.write_analog(105) //read the signs in P0 pin

while True:
    for i in range(1, 5):
        volume_list[i - 1] = volume_list[i] //delete the oldest from the values and make room for the new
            one

    vol = 0

    for j in range(3):
        vol += microphone.sound_level() //read 3 values and add
        sleep(100) //we can control the sampling frequency

    if vol < 30:
        volume_list[4] = 0
    else:
        volume_list[4] = 1 //if it reaches the sensitivity, let it be 1, if not 0

    for i in range(0, 5):
        display.set_pixel(4 - i, 2, volume_list[i]*9) //write the list on the LED display with maximum
            brightness

    print(volume_list)

    if volume_list == password_list: //if we hit the secret code, open the door and close it
        pin0.write_analog(61)
        sleep(2000)
        pin0.write_analog(105)
        sleep(100)

```