**Noise pollution monitoring**

**-**Internet of things

**main.py**

'''

from machine import Pin, ADC

from time import sleep

pot = ADC(Pin(2))

pot.atten(ADC.ATTN\_11DB) #Full range: 3.3v

#ADC.ATTN\_0DB: Maximum voltage of 1.2V

#ADC.ATTN\_2\_5DB: Maximum voltage of 1.5V

#ADC.ATTN\_6DB: Maximum voltage of 2.0V

#ADC.ATTN\_11DB: Maximum voltage of 3.3V

while True:

pot\_value = pot.read()

print(pot\_value)

sleep(0.1)

'''

import machine, time

a = machine.ADC(machine.Pin(32))

while True:

sample = a.read() # we want 16 bits, a.read() returns 10 bits

print(sample)

time.sleep(1/44100

**diagram.json:**

{

  "version": 1,

  "author": "Gokul Raja",

  "editor": "wokwi",

  "parts": [

    {

      "type": "wokwi-esp32-devkit-v1",

      "id": "esp",

      "top": -52.9,

      "left": 62.2,

      "attrs": { "env": "micropython-20231005-v1.21.0" }

    },

    { "type": "wokwi-microphone", "id": "mic", "top": -16.98, "left": 263.79, "attrs": {} }

  ],

  "connections": [

    [ "esp:TX0", "$serialMonitor:RX", "", [] ],

    [ "esp:RX0", "$serialMonitor:TX", "", [] ],

    [ "mic:1", "esp:D2", "green", [ "v0" ] ],

    [ "mic:2", "esp:GND.1", "green", [ "v0" ] ]

  ],

  "serialMonitor": { "display": "plotter" },

  "dependencies": {}

}

**Wokwi platform address:**

https://wokwi.com/projects/378838945740627969