Voltage Across a Potentiometer

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Below is a link to a video of me turning my potentiometer to change the voltage read by my CPX. You can see the voltage change on the plot in MU on my screen.

[Potentiometer](https://drive.google.com/file/d/1s0_sWt5K5uNXPlLHD1VLKPbj5Ex1j0NJ/view?usp=sharing)

Below is my code in MU on my CPX to read the voltage across the potentiometer:

import board

import analogio

import time

potentio = analogio.AnalogIn(board.A6)

while True:

print((potentio.value,time.monotonic()))

time.sleep(0.1)

Below is my code in Spyder to take the data from the CPX and plot the data in a graph shown below as well:

"""

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"""

import numpy as np

import matplotlib.pyplot as plt

data = np.loadtxt('PotentioData.txt')

time = data[:,1]

time -= time[0]

D = data[:,0]

voltage = 5\*D/2.0\*\*16

plt.plot(time, voltage)

plt.grid()

plt.xlabel('Time (sec)')

plt.ylabel('Voltage (V)')

plt.show()

