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

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:

```python
"""
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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()