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Github Repo: https://github.com/m6jiang/SmartPlug-dlee1995-dtiu-hberns-m6jiang-rnasreld

Calculations:

 Light: 0.29 kOhm Dark: 30 kOhm
 Dark: 1.25 V

Light: 4.86V

3. 1023 = 3.3V to 388 = 1.25V

4. No because max voltage was beyond the range of the MCP

5. New range: 1-3,3V (calculated value) MCP range: 0.65-3.2V(observed)

There was a software issue and we added a 5k resistor with the photocell to reduce the max value of the range.

Data:

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('DHT Celcius reading is: ', 22.399999618530273)
('DHT Farenheit reading is: ', 72.13999862670899)
('DHT Humidity reading is: ', 29.0)
('MCP reading is: ', 861)
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('DHT Humidity reading is: ', 28.899999618530273)
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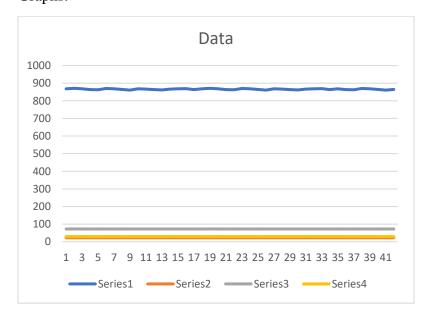
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                                                                                                                                           MCP reading is:
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Graphs:



Series 1: MCP

Series 2: C

Series 3: F

Series 4: Humidity