

Light Sensor

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RBT211 – Arduino Embedded Programming

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Engineering Notebook – Light Sensor/Light Meter

Going back to the Light meter project I tried to follow the instructions. It was odd at first because I didn't think I had taken this road before. I couldn't go back to the class because I couldn't find it in Teams, and it isn't part of the Class Recordings in Canvas. So, I looked at the code that I had copied from what I believed was the class and it was all confusing. I decided to start from scratch and try to follow the instructions as they are written.

I went into GitHub to find the Light sensor file and copied that to Microchip. It took a couple of minutes to find what I needed in the pinDefines.h file. I then ran the code, and I had two green lights come on. When I spun the potentiometer one of the lights went out. Spinning back the other way and the light came back on.

Moving on I connected the Photo Sensor and with the light sensor file running my board lit up one green light. Then I pulled up the code from class as I have Light_Meter. When I ran this code with the Photo Sensor, I got a dim yellow light that was four LEDs from the right. I put my finger over the photo sensor and the light got even dimmer.

I uncommented some ports and ran the code again and I got three green lights, and two yellow ones light up. Two of the green ones would blink rapidly and one of the yellow ones is very dim. When I put my hand over the sensor the green lights blink a bit but stay on more solid and one of the yellow ones turns off and the other yellow remains very dim.

I have three videos:

<https://youtu.be/symTV6o8QXg>

<https://youtu.be/61q5clj3ZLE>

<https://youtu.be/zi4tdEghYYE>

I am still somewhat uncertain as to how to manipulate the registers. I wish we had more time to explore the registers, so that I might understand them better.



