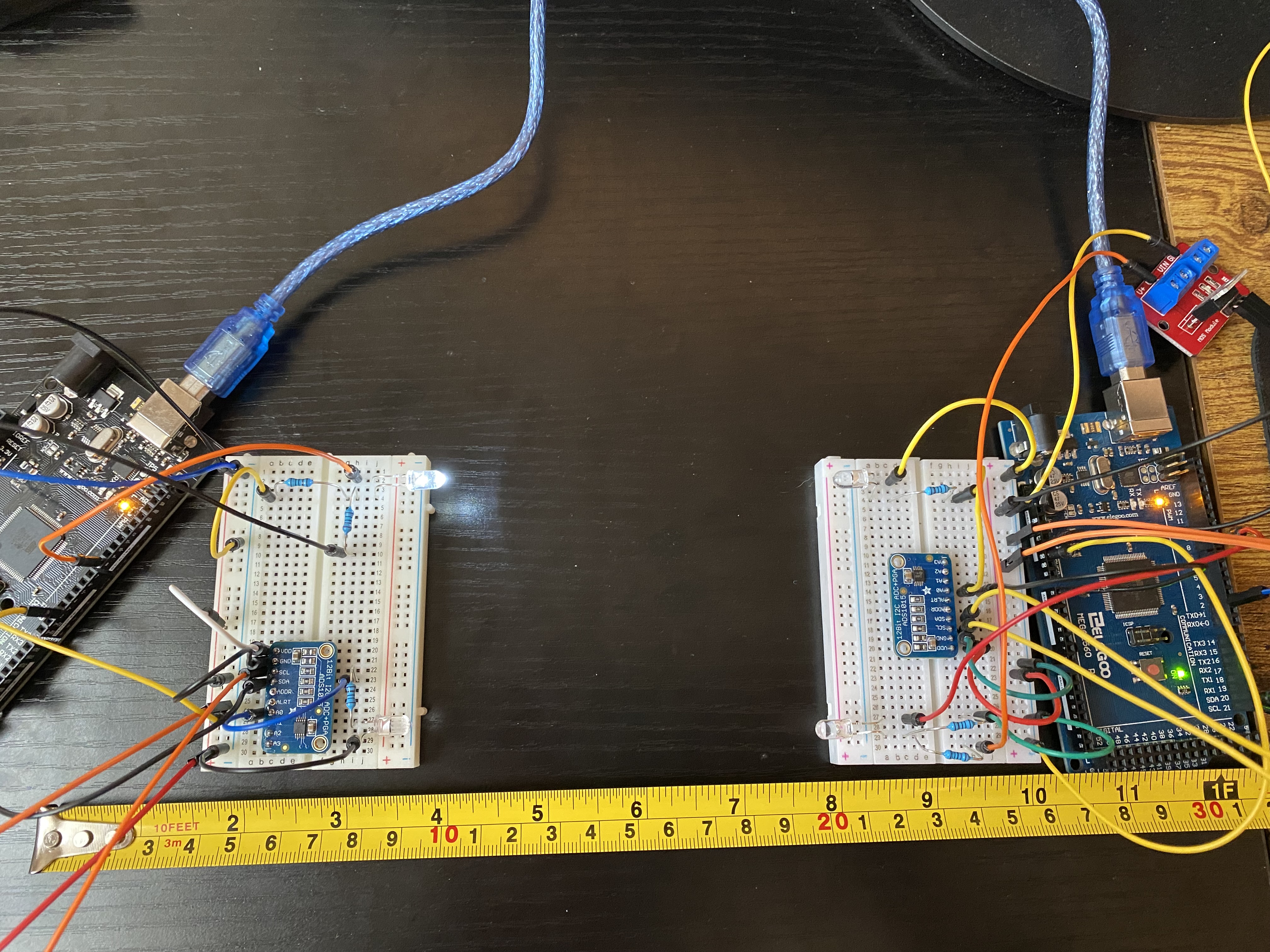
The graphs below show the Photodiode Values along the Y-axis and the number of values on the X-axis. The code is designed to test 200 values so once 200 values have been read then the testing stops. To test distance, I used a bright LED and a tape measure to adjust the distance between the LED and the Photodiode. The LED starts a half inch away and then increases half an inch to 6 inches away. Then increments of an inch are tested to a foot away. The room itself had a reading between 47 and 48 so we can see that as the distance increases the less reliable the Photodiode is to read the data sent. The circuit constructed is an upgrade of our TX circuit to include MOSFETS with resistors and the RX circuit includes ADC chip alongside photodiode to provide better results.



Here is a general graph of the Photodiode values decreasing as distance increases.

