Assignment 3

1. Which MQTT broker did you implement along with a step by step instruction to install it on a laptop/computer,
    a. Mosquitto;
    b. There is another document about installation called installation.txt.
2. What frequency did you sample the ADC at?
    a. The period is 100 msec. So the frequency is 10Hz.
3. What baud rate did you use to send data from Arduino to laptop # 2?
    a. 9600baud
4. how did you scale values from potentiometer/LDR before posting to their corresponding topics so that they could be compared by Rasp Pi,
    a. First we normalize the values from LDR and Potentiometer using the below function :
       Normalized Value = (inputValue - minValue) / (maxValue - minValue)
    b. Then we scale the normalized value to 0-10 :
       Value sent to topic = 10 * Normalized Value
5. What was the range of raw values (min and max) that your ADC got from the LDR?
    a. 20 – 750
6. What are the range of raw values that your ADC got from potentiometer(min and max)?
    a. 0 - 1023
7. What are the range of scaled values (min and max) that resulted after you scaled the values from the potentiometer and/or LDR?
    a. The scaled value is 0 – 10