

# LAB 3 REPORT

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# INTRODUCTION

In this Lab we were introduced to three types of displays. The three types of displays are a 7-segment display, LCD screen display, and a Multiplexed (MUX) 7-segment display. In this lab report when I talk about the Multiplexed (MUX) 7-segment display I'm talking about the pre-wired component that Dr. P built. So, Even though the Multiplexed (MUX) 7-segment has resistors on it I well not mention them in the hardware.

# CIRCUIT 1

- Hardware: 7-segmented display (common-cathode), 10k  $\Omega$ (7), Arduino UNO.
- Summary: In this circuit we display a hexadecimal characters 0 to F on a 7-segmented display with 500 ms delay between each character.
- Code: Most of the code was given for this circuit. In the setup() we configured the segment pins as outs. In the loop() we defined the array size, numeral array with premade numeral array derived in Activity 4. Then made a for loop (unsigned char j = 0; j < n; j++)

## CIRCUIT 2

- Hardware: LCD screen display, 330  $\Omega$ , Arduino UNO, Potentiometer (2).
- Summary: In this circuit we have a potentiometer that has a value between 0 (V0) to 1023 (V5) and

## CIRCUIT 3

- Hardware: Multiplexed (MUX) 7-segment display, Arduino UNO, Potentiometer.
- Summary: In this circuit we have a potentiometer that has a value between 0 (V0) to 1023 (V5) and

# QUESTIONS



# CHALLENGES

# CONCLUSION