

## Lab report 4 (rubric)

### Lab part 2

#### **Comparator circuit: (3.5 points)**

Draw the noisy signal  $V_i(t)$  when  $F = 1$ ,  $F = 0$ ,  $F = 0.5$ . What is the output  $V_o(t)$  when  $F = 1$ ,  $F = 0$ ,  $F = 0.5$ . Explain the behavior of LED 1 and LED 2 you observed in the lab with different POT settings

#### **Schmitt trigger: (3.5 points)**

Explain how the Schmitt trigger help eliminate chatter? Perhaps use a representative diagram showing how the threshold you computed helps eliminate chatter.

### Lab part 3

#### **Timer circuit : (3 points)**

When does the capacitor charge? At what time did the LED turn on? How can you change the time the LED turns on?