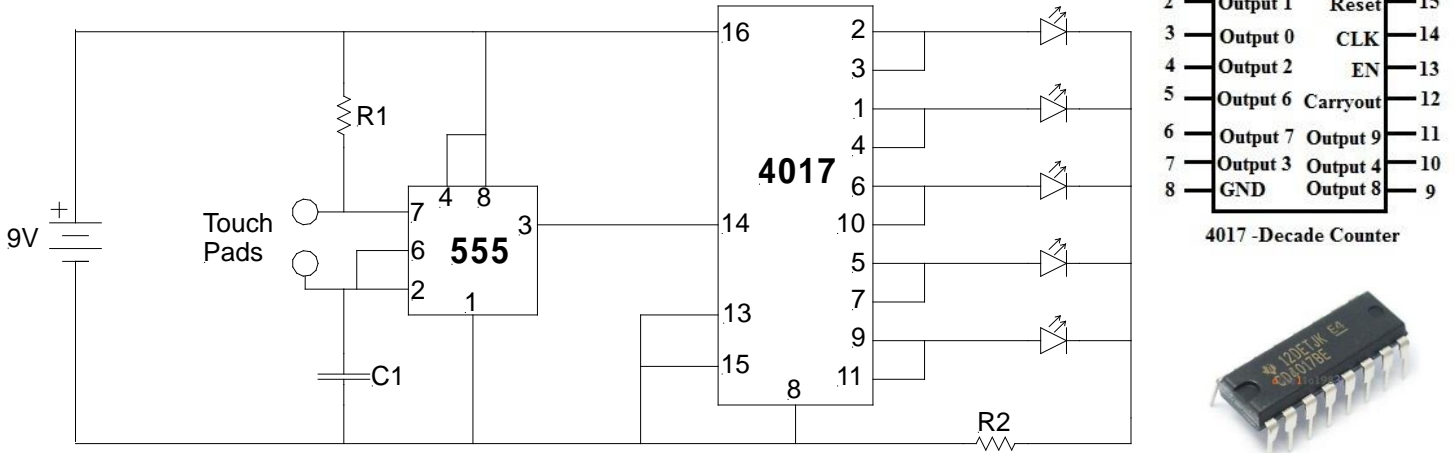


Breadboard Lab #11 (Level 2)

“555 & 4017 Decision maker”

- 1) Breadboard the following schematic diagram using a 555 and a 4017. Set the Power Supply to 9 volts.



C1	.1uf	555 Integrated Circuit
R1	3.3K ohm	4017 Integrated Circuit
R2	330 ohm	2 thumb tacks
L1-L5	Leds	

- 2) When you connect the circuit to power, one LED should be on. When you touch the pads with a finger, the resistance in your finger completes the circuit and the lights start moving. When you release your finger it stops.
- 3) Change the .1uf capacitor to a 10uf also test the circuit with a moisten your finger. What happens?
- 4) Answer the following questions
- Your finger touching the Touch Pads acts as a _____. The more moist your finger is, the lower the _____ and therefore the LEDs move _____.
 - The frequency at which the LED blinks is controlled by _____, _____ and _____.
 - The larger the value of the capacitor, the _____ the frequency of pulses/flashes of the LEDs.
 - If you wanted the 5 LEDs to go in order, what pins would you connect to LEDS if you were starting at **Output 0**?