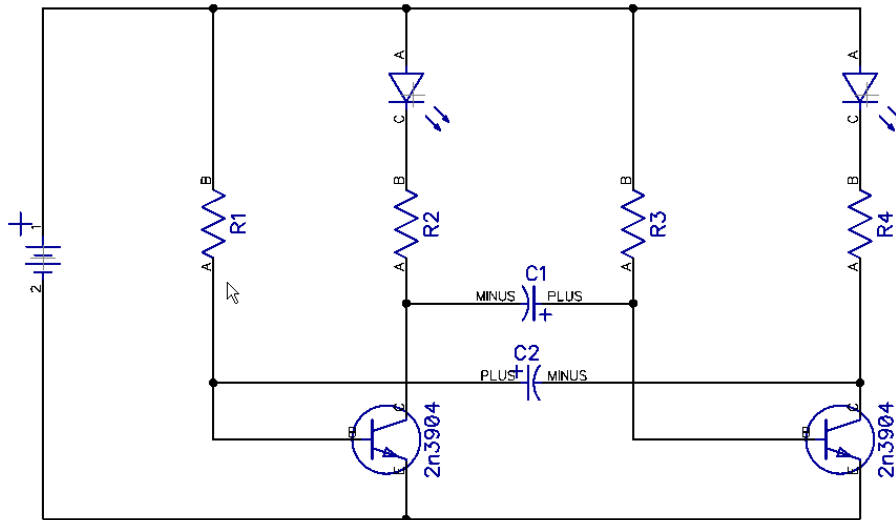


# Breadboard Lab #8

## *“Flashing lights”*

- 1) Breadboard the following schematic diagram. Make sure your wires are flat! Set the Power Supply to 9 volts.



R1,R3: 60K (blue, black, orange)  
 C1,C2: 10uf capacitor  
 R2,R4: 330 ohm (orange, orange, brown)

- 2) When the circuit is working properly the two transistors oscillate (switch back and forth) causing the LEDs to flash alternately. Use the [Electronic Components PowerPoint presentation](#) from class to help.
- 3) Answer the following questions
- When a 100uf capacitor is substituted for the 10uf capacitor, the frequency the LEDs flash will \_\_\_\_\_.
  - If you substitute the 330 resistors with 6.8K resistors the brightness of the LEDs would \_\_\_\_\_.
  - The cathodes of the LEDs are connected to the \_\_\_\_\_.
  - The negative leads of the capacitors are connected to the \_\_\_\_\_ and the \_\_\_\_\_.