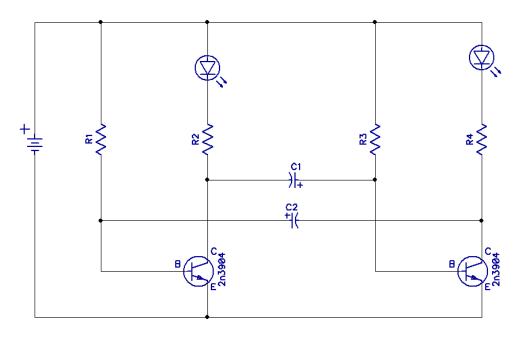
Breadboard Lab #8 "Flashing lights"

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



R1,R3: 10K (brown, 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 <u>Electronic Components</u> <u>PowerPoint presentation</u> from class to help.
- 3) Answer the following questions
 - a) When a 100uf capacitor is substituted for the 10uf capacitor, the frequency the LEDs flash will _____.
 - b) If you substitute the 330 resistors with 10K resistors the brightness of the LEDs would ______.
 - c) The cathodes of the LEDs are connected to the _____.
 - d) The negative leads of the capacitors are connected to the ______ and the ______.