

## **Blinker LED's Circuit with BJT (NPN)**

### **Description of Circuit**

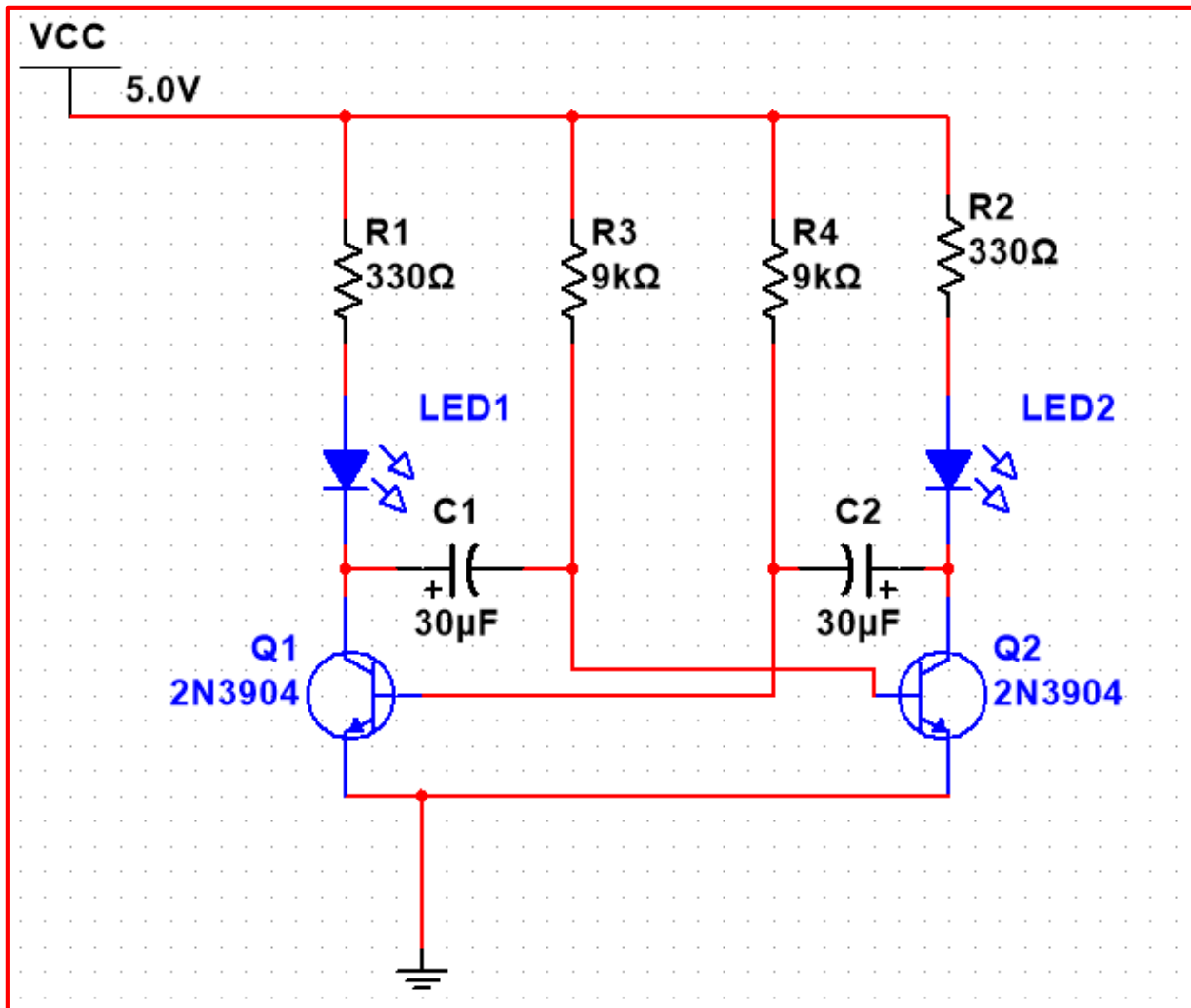
In this Experiment I used a circuit design in which two LED'S will continuously turn on and off separately. It's a dual transistor based LED blinker in which I used a BJT – NPN transistor. The LED's will independently turn on one by one. It also uses 4 resistors and 2 capacitors, it controls how much current that goes back to charge the capacitor. The size of the resistors and the capacitor will determine the blinking speed. The two capacitors C1 and C2 will alternate between being charged and discharged and thereby turning the transistors ON and OFF. When a transistor is ON it allows current to flow through it so that the LED above it will light up.

### **Components that were used:**

- 1x VCC
- 2x 9k $\Omega$  Resistors
- 2x 330 $\Omega$  Resistors
- 2x LED'S
- 2x BJT NPN (2N3904)
- 2x Capacitor
- 1x Ground

### **Objective/function of circuit:**

In this circuit it functions like a car blinker or an ambulance alert lights. Two LED's must continuously turn on and off separately. It also uses A BJT NPN transistors. This LED blinking circuit utilizes for any visual signs it can be used in any roadways or advertisement.



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