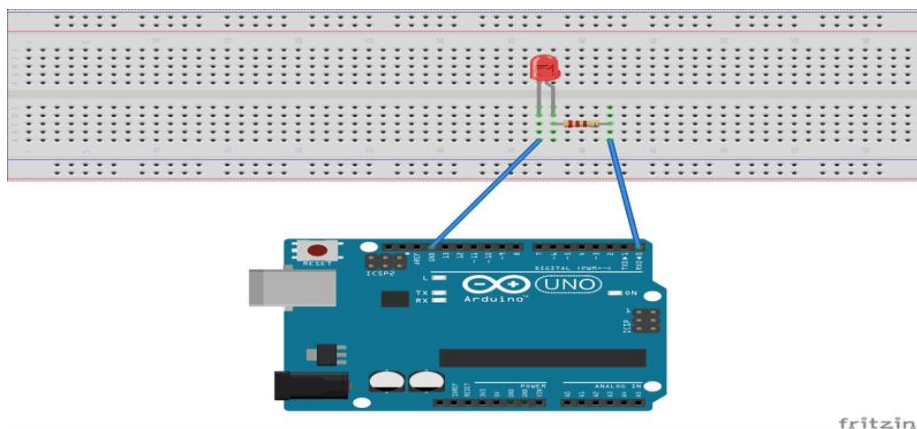
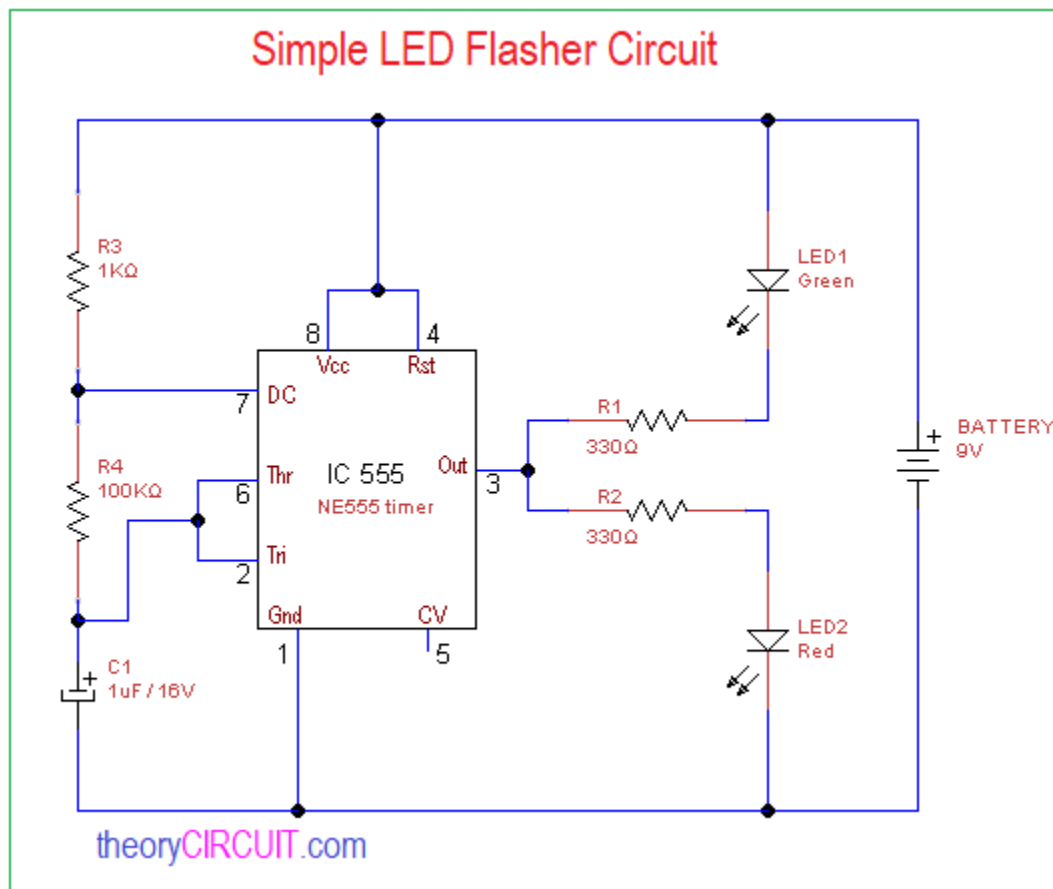


Circuit:



Theory:

Simple LED flasher circuit can be designed by using timer IC 555, as we know the timer IC has internal voltage divider made by three 5KΩ Resistor hence the timer IC referred as 555. These devices are precision timing circuits capable of producing accurate time delays or oscillation. It can work in either monostable, bistable or astable mode, and

then output frequency and duty cycles can be controlled by varying the value of external timing Resistor and Capacitor and also this timer IC available in different package.

Observation:

The AD654 is a voltage-to frequency converter that can be used for many functions, ranging from precise signal transmission to simple LED flashing

- Op-amp circuits require input bias currents, and offset errors can be minimized by matching the resistances that each input bias current flows through
- The two voltage-feedback op-amp input voltage levels track each other closely when negative feedback is applied around the op-amp.

Code:

```
// The setup function runs when you press reset or
power the board
void setup()
{
  // initialize digital pin 0 as an output.
  pinMode(0, OUTPUT);
}
// the loop function runs over and over again forever
void loop()
{
  digitalWrite(0, HIGH); // turn the LED n (HIGH is the
voltage level)
```

```
delay(500);          // wait for a second
digitalWrite(0, LOW); // turn the LED off by making
the voltage LOW
delay(500);          // wait for a second
}
```