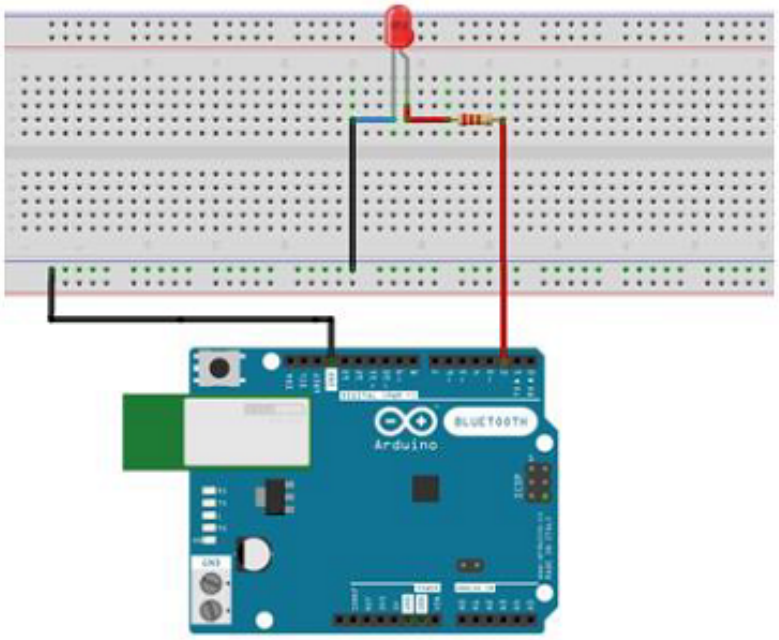
BLINKING LED

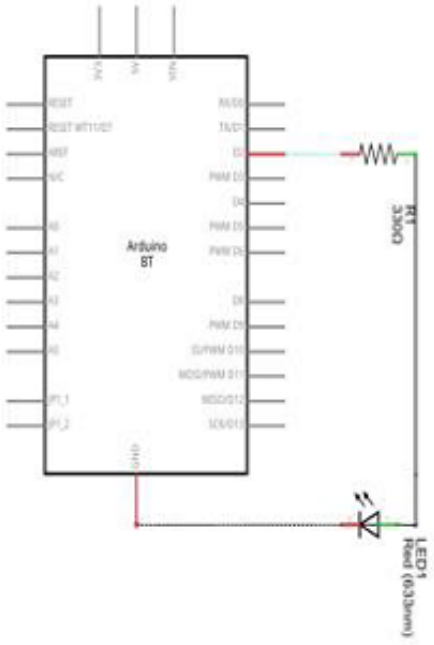
COMPONENTS REQUIRED

- 1 x Breadboard
- 1 x Arduino Uno R3
- 1 x LED
- 1 x 330Ω Resistor
- 2 x Jumper

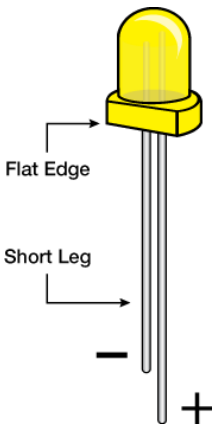
PROCEDURE

Follow the circuit diagram and hook up the components on the breadboard as shown in the image given below.

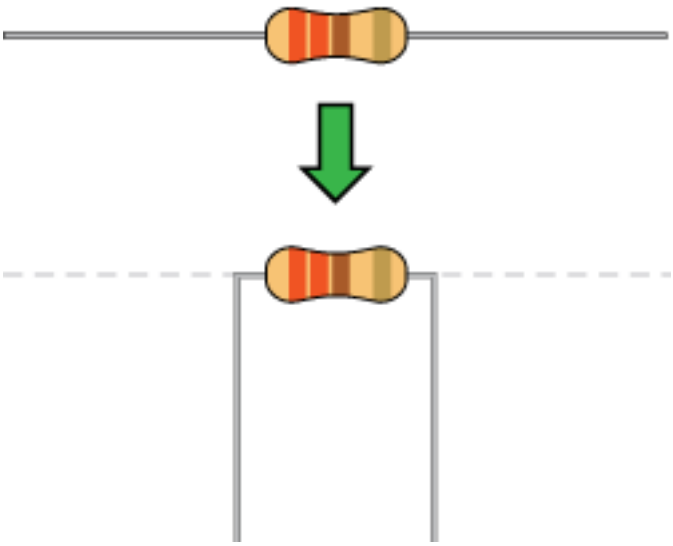




Note − To find out the polarity of an LED, look at it closely. The shorter of the two legs, towards the flat edge of the bulb indicates the negative terminal.



Components like resistors need to have their terminals bent into 90° angles in order to fit the breadboard sockets properly. You can also cut the terminals shorter.



CODE

```
/*
  Blink
  Turns on an LED on for one second, then off for one second, repeatedly.
*/

// the setup function runs once when you press reset or power the board

void setup() {  // initialize digital pin 13 as an output.
  pinMode( 2, OUTPUT );
}

// the loop function runs over and over again forever

void loop() {
  digitalWrite( 2, HIGH ); // turn the LED on (HIGH is the voltage level)
  delay( 1000 ); // wait for a second
  digitalWrite( 2, LOW ); // turn the LED off by making the voltage LOW
  delay( 1000 ); // wait for a second
}
```

CODE TO NOTE

pinMode(2, OUTPUT) – Before you can use one of Arduino's pins, you need to tell Arduino Uno R3 whether it is an INPUT or OUTPUT. We use a built-in "function" called pinMode() to do this.

digitalWrite(2, HIGH) – When you are using a pin as an OUTPUT, you can command it to be HIGH (output 5 volts), or LOW (output 0 volts).

RESULT

You should see your LED turn on and off. If the required output is not seen, make sure you have assembled the circuit correctly, and verified and uploaded the code to your board.s