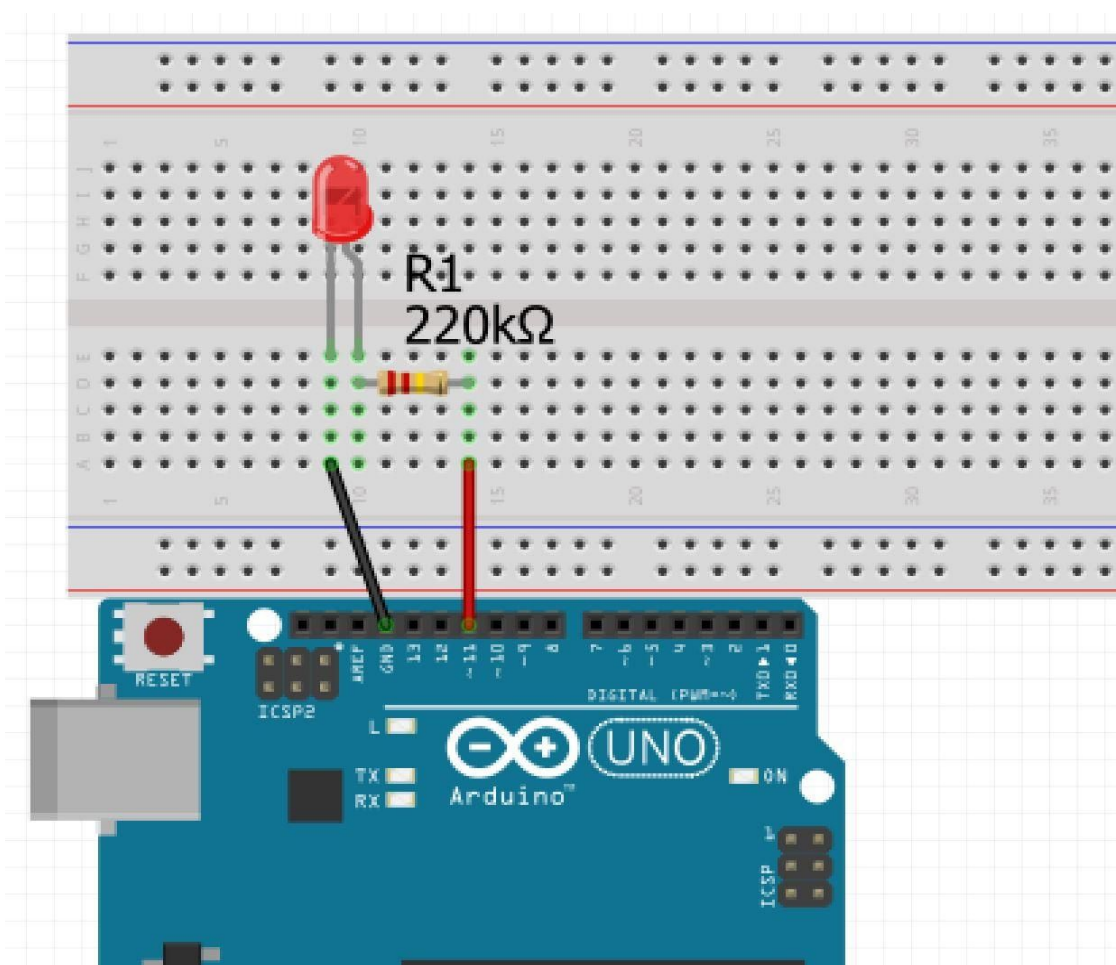




## Exercise 1: Basic LED

In this exercise, you'll build a basic LED (light emitting diode) that blinks on and off at a certain frequency. After you build the system using the code provided, try changing the delay parameters to make it blink faster or slower.

### Step 1: Assemble the Arduino and breadboard.



#### **Parts needed:**

Arduino board

bread board

1 LED



1 220k Ohm resistor

2 jumper wires



## Step 2: Program the Arduino.

sketch\_nov27a | Arduino 1.8.8 (Windows Store 1.8.19.0)

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```
int LED1 = 11;           //declares pin 11 to be LED1

void setup() {
  pinMode(LED1, OUTPUT); //declares LED1 to be an output
}

void loop() {
  digitalWrite(LED1, HIGH); // sends signal from pin 11
  delay(3000)               // signal will last 3000 milliseconds(3 seconds)
  digitalWrite(LED1, LOW);  // cuts off signal from pin 11
  delay(4000)               //will delay for 4000 milliseconds(4 seconds)
}

// loop will repeat itself
```