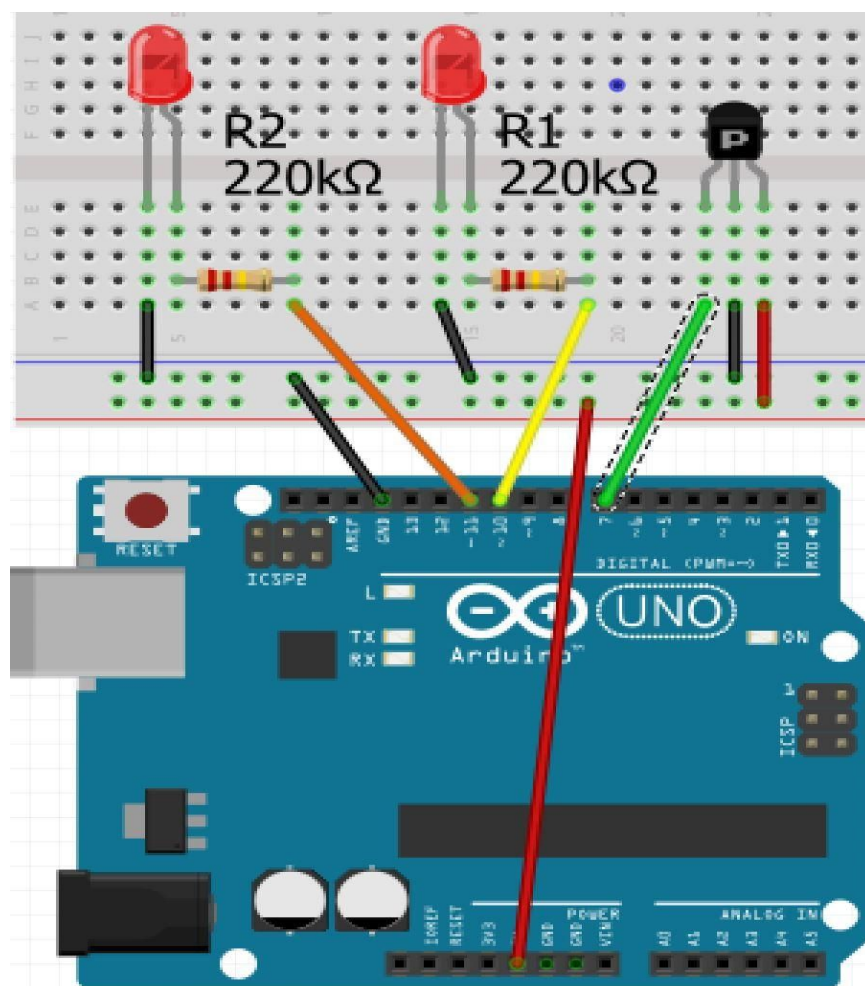




Exercise 4: Remote control LED

In this exercise, you'll program two LED lights to be controlled via a bluetooth remote control. When you press a button, the remote control will send a signal to a bluetooth receiver. This information then triggers the lights to go on or off.

Step 1: Assemble the Arduino and breadboard.



Parts needed:

Arduino board
Bread board
1 IR receiver



2 LED bulbs

2 220k ohm resistors

9 jumper wires

Step 2: Program the Arduino.

2LEDREMOTE | Arduino 1.8.8 (Windows Store 1.8.19.0)

File Edit Sketch Tools Help

```
2LEDREMOTE §  
  
#include <IRremote.h>           // include remote library  
const int RECV_PIN = 7;         // set pin 7 as receiver  
IRrecv irrecv(RECV_PIN);  
decode_results results;  
const int redPin = 10;          //set led1 to pin 10  
const int greenPin = 11;        //set led2 to pin 11  
void setup() {  
  irrecv.enableIRIn();  
  irrecv.blink13(true);  
  pinMode(redPin, OUTPUT);      //set pin 10 to output  
  pinMode(greenPin, OUTPUT);    //set pin 11 to output  
}  
void loop() {  
  if (irrecv.decode(&results)) {  
    switch(results.value) {  
      case 0x3D9AE3F7: //Keypad button "2"  
        digitalWrite(redPin, HIGH); //turns pin 10 on when button 2 is presed  
        delay(2000);  
      }  
      switch(results.value) {  
        case 0xC101E57B: //Keypad button "0"  
          digitalWrite(redPin, LOW); //turns pin 10 off when button 0 is presed  
          delay(2000);  
        }  
        switch(results.value) {  
          case 0x6182021B: //Keypad button "3"  
            digitalWrite(greenPin, HIGH); //turns pin 11 on when button 3 is presed  
            delay(2000);  
          }  
          switch(results.value) {  
            case 0x9716BE3F: //Keypad button "1"  
              digitalWrite(greenPin, LOW); //turns pin 11 off when button 1 is presed  
              delay(2000);  
            }  
          }  
          irrecv.resume();  
        }  
      }  
    }  
  }  
}
```