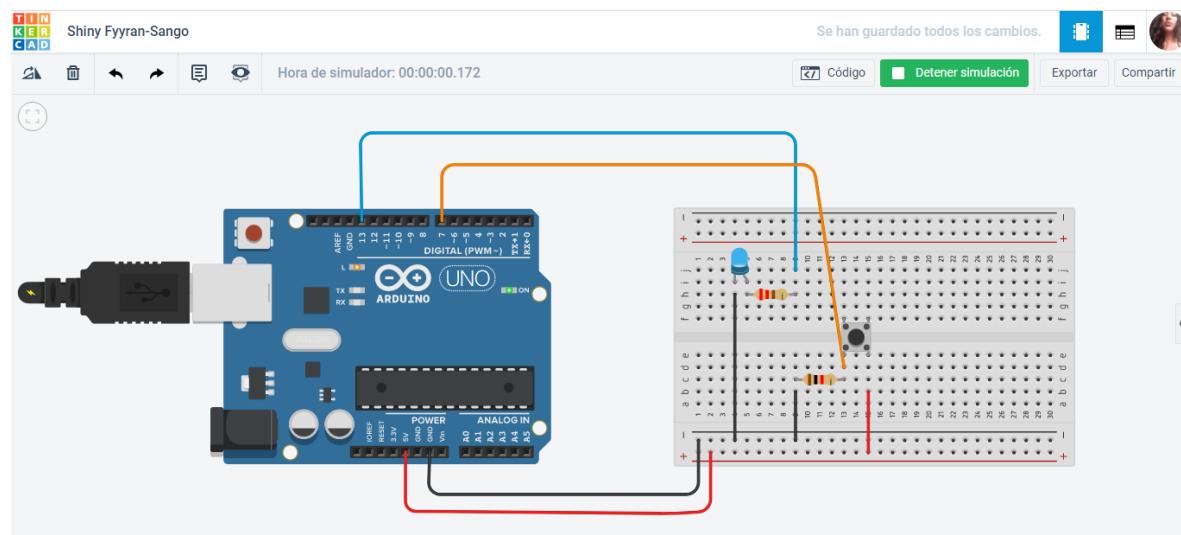


## Práctica 1. Parpadeo de un LED con Arduino UNO

### PARTE 4. blinkBoton

Para esta parte de la práctica, utilizará el circuito que aparece en la siguiente imagen.



Una vez realizado el circuito, teclee el siguiente código.

```
1 // constants won't change. They're used here to set pin numbers:  
2 const int buttonPin = 7;      // the number of the pushbutton pin  
3 const int ledPin = 13;        // the number of the LED pin  
4  
5 // Variables will change:  
6 int ledState = HIGH;          // the current state of the output p  
7 int buttonState;              // the current reading from the inpu  
8 int lastButtonState = LOW;    // the previous reading from the inp  
9  
10 // the following variables are unsigned longs because the time, n  
11 // milliseconds, will quickly become a bigger number than can be  
12 unsigned long lastDebounceTime = 0; // the last time the output  
13 unsigned long debounceDelay = 50; // the debounce time; increas  
14  
15 void setup() {  
16     pinMode(buttonPin, INPUT);  
17     pinMode(ledPin, OUTPUT);  
18  
19     // set initial LED state  
20     digitalWrite(ledPin, ledState);  
21 }  
22  
23 void loop() {  
24     // read the state of the switch into a local variable:  
25     int reading = digitalRead(buttonPin);  
26  
27     // check to see if you just pressed the button  
28     // (i.e. the input went from LOW to HIGH), and you've waited lo  
29     // since the last press to ignore any noise:  
30  
31     // If the switch changed, due to noise or pressing:  
32     if (reading != lastButtonState) {  
33         // reset the debouncing timer  
34         lastDebounceTime = millis();  
35     }  
36  
37     if ((millis() - lastDebounceTime) > debounceDelay) {  
38         // whatever the reading is at, it's been there for longer tha  
39         // delay, so take it as the actual current state:  
40  
41         // if the button state has changed:  
42         if (reading != buttonState) {  
43             buttonState = reading;  
44  
45             // only toggle the LED if the new button state is HIGH  
46             if (buttonState == HIGH) {  
47                 ledState = !ledState;  
48             }  
49         }  
50     }
```