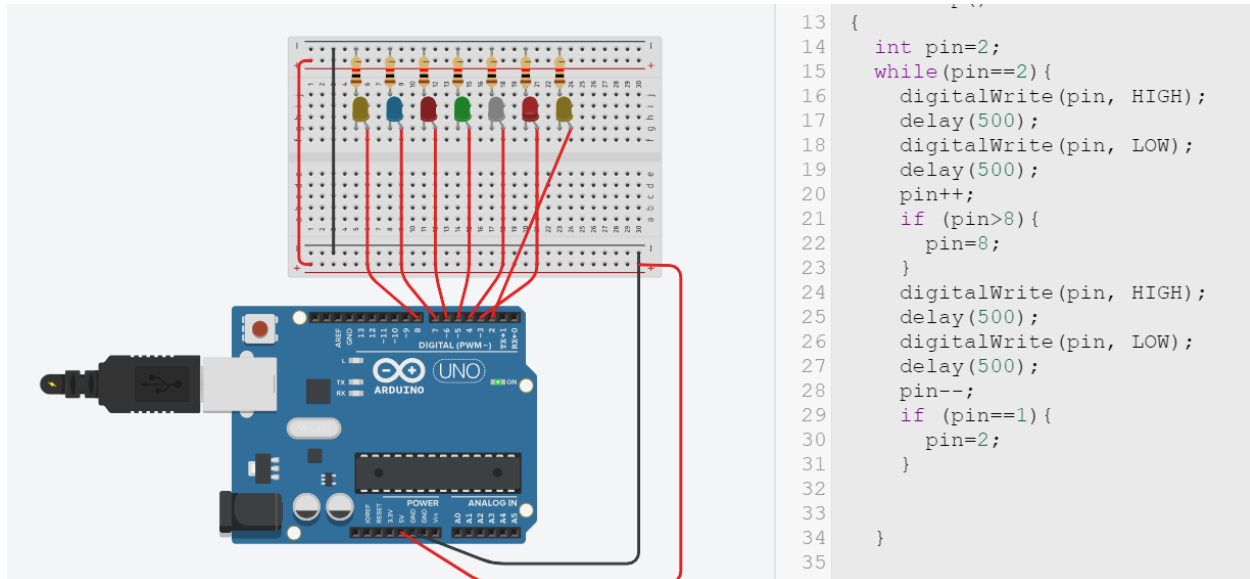
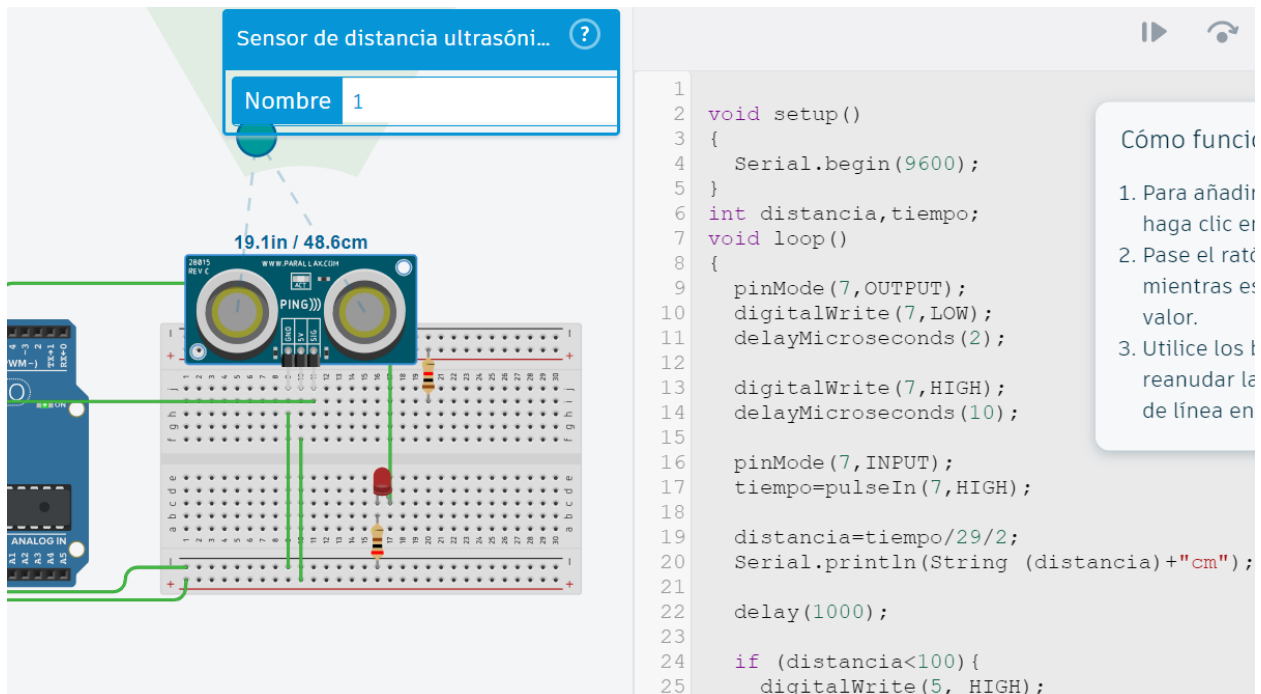


**Electrónica y sistemas digitales****Actividad en clase****Autor/es: CARLA NOEMI CUZCO PEÑAFIEL****Carrera: Tecnología Superior en Desarrollo de Software**

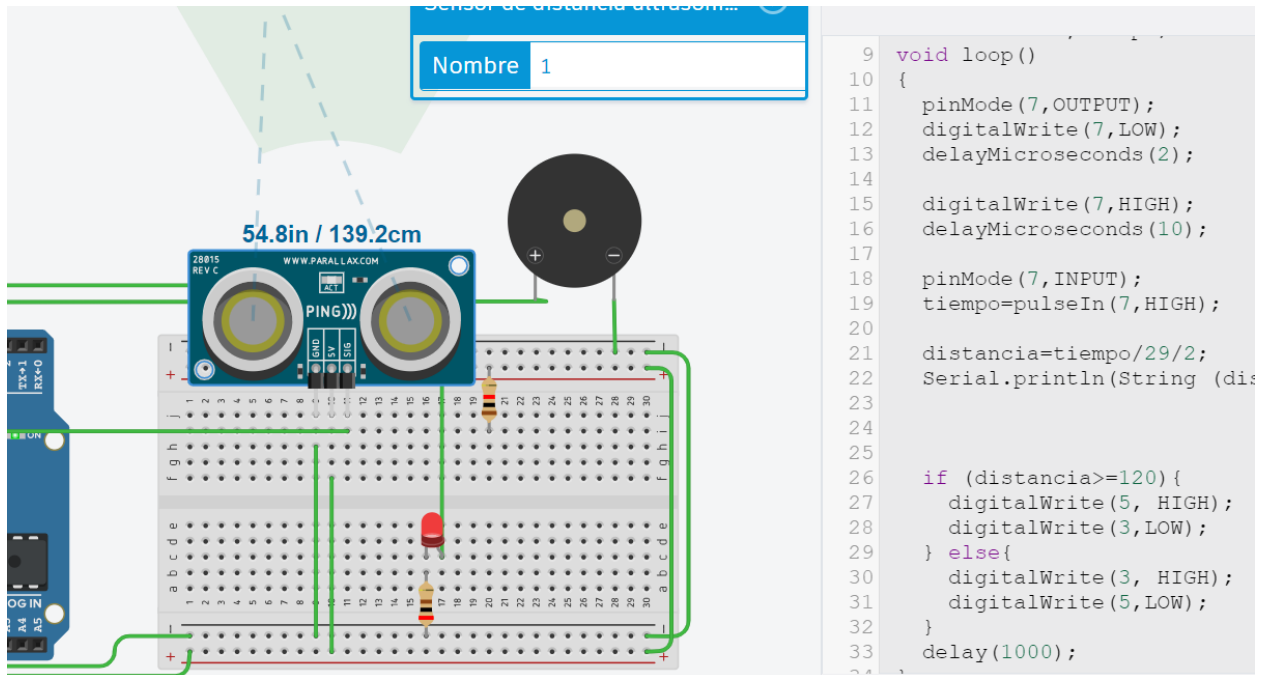
Actividad: Encender y apagar 7 leds utilizando el bucle while de izquierda a derecha y viceversa



Encender un led cuando la distancia sea menor a 100cm



Actividad: Encender una alarma si la distancia es menor de 120cm, si es mayor encender un foco



The image displays a breadboard circuit and its corresponding Arduino code. The circuit includes an ultrasonic sensor (HC-SR04) connected to a breadboard. The sensor's VCC pin is connected to the 5V supply, GND to ground, and the TRIG pin to digital pin 7. The sensor's ECHO pin is connected to digital pin 3. A red LED is connected to digital pin 5 (anode) and ground (cathode). A buzzer is connected to digital pin 3 (positive) and ground (negative). The code is as follows:

```
9 void loop()
10 {
11   pinMode(7, OUTPUT);
12   digitalWrite(7, LOW);
13   delayMicroseconds(2);
14
15   digitalWrite(7, HIGH);
16   delayMicroseconds(10);
17
18   pinMode(7, INPUT);
19   tiempo=pulseIn(7, HIGH);
20
21   distancia=tiempo/29/2;
22   Serial.println(String (distancia));
23
24
25
26   if (distancia>=120){
27     digitalWrite(5, HIGH);
28     digitalWrite(3, LOW);
29   } else{
30     digitalWrite(3, HIGH);
31     digitalWrite(5, LOW);
32   }
33   delay(1000);
34 }
```