CURSO DE ARDUINO

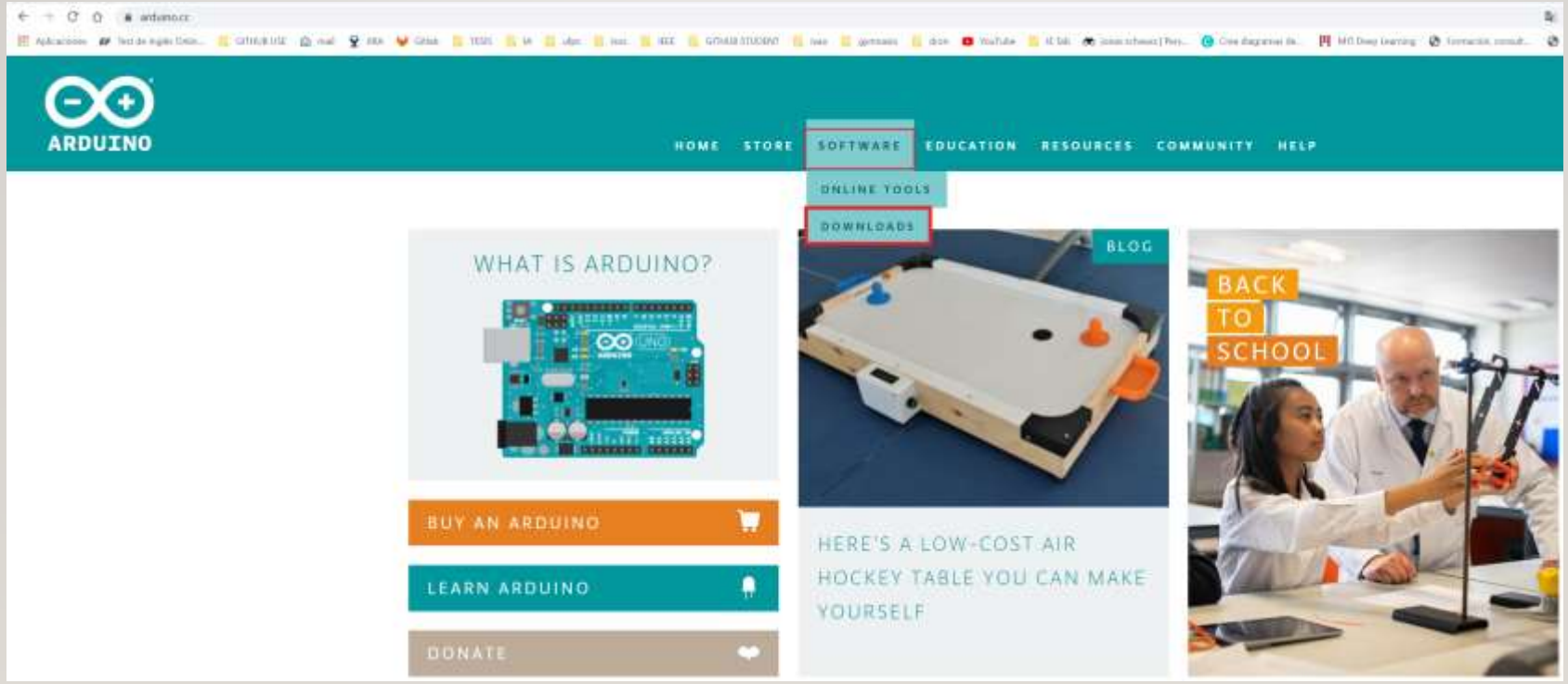
DIRIGIDO POR: MIGUEL ANGEL CALIFA URQUIZA

AGENDA

- Como instalar el IDE de Arduino.
- Menú de herramientas.
- Estructura básica de un programa.
- Ejemplos basicos.

COMO INSTALAR EL IDE DE ARDUINO

- URL: https://www.arduino.cc



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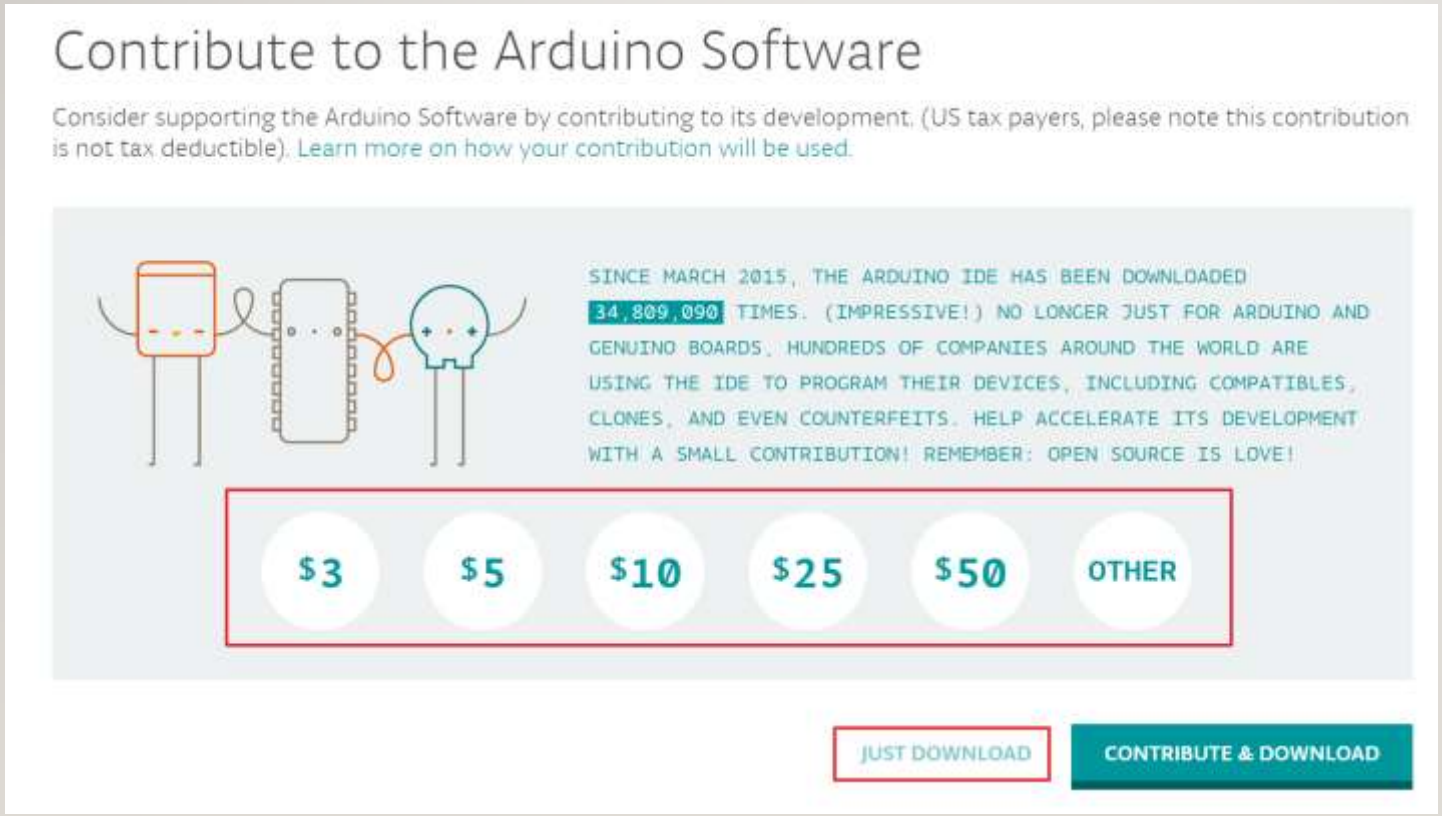

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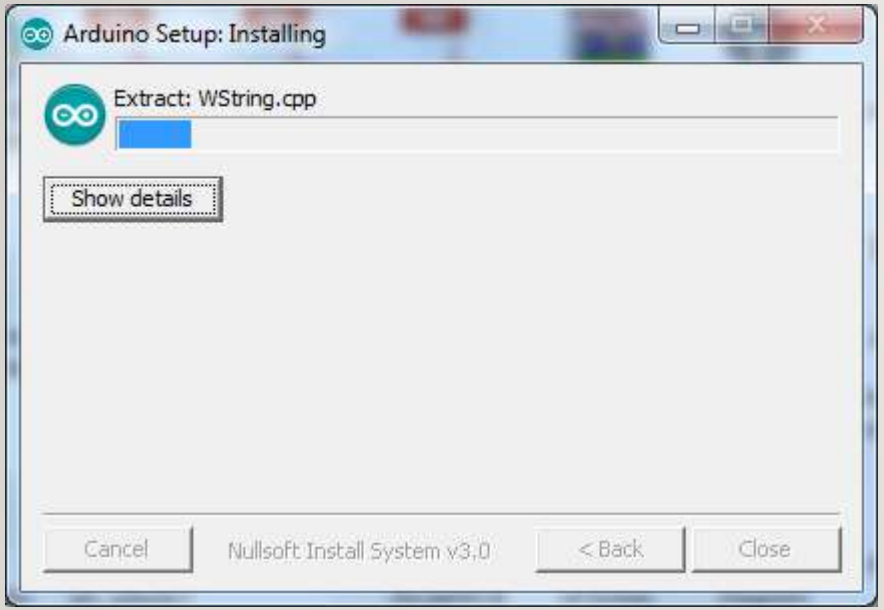
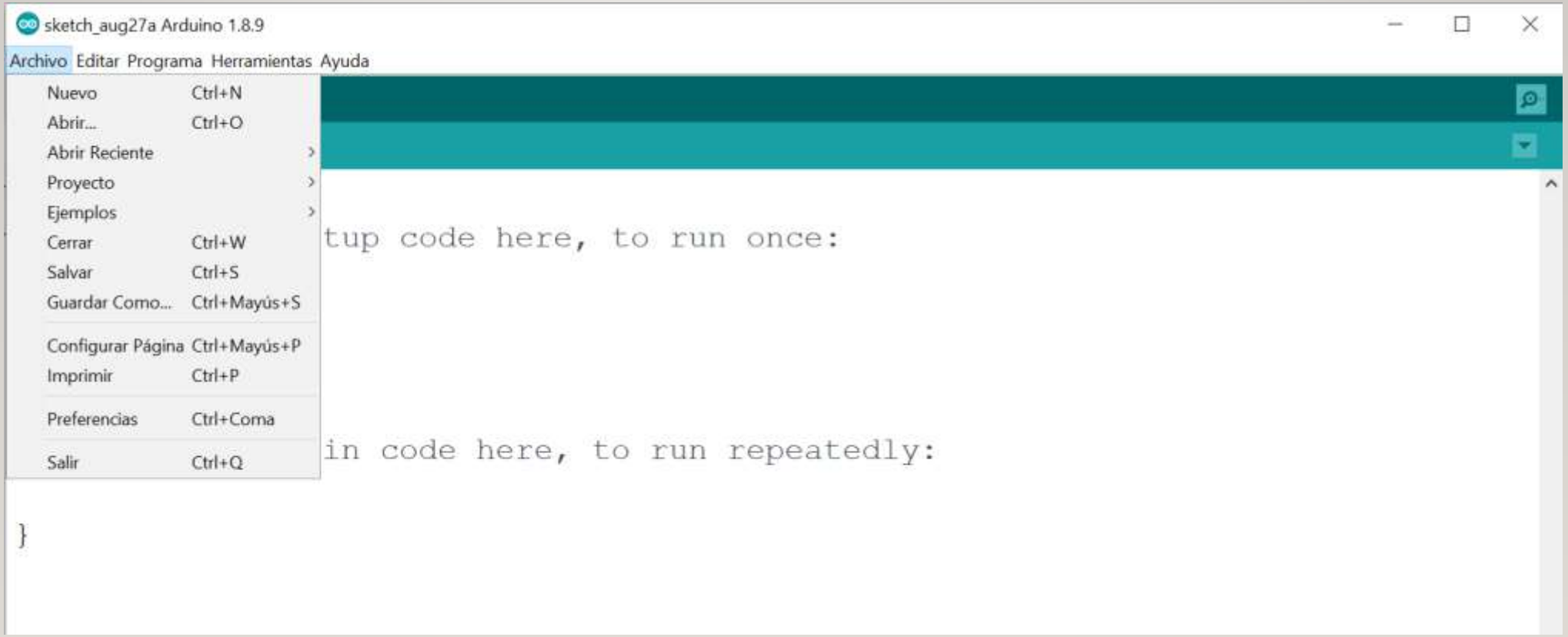


MENU DE ARDUINO



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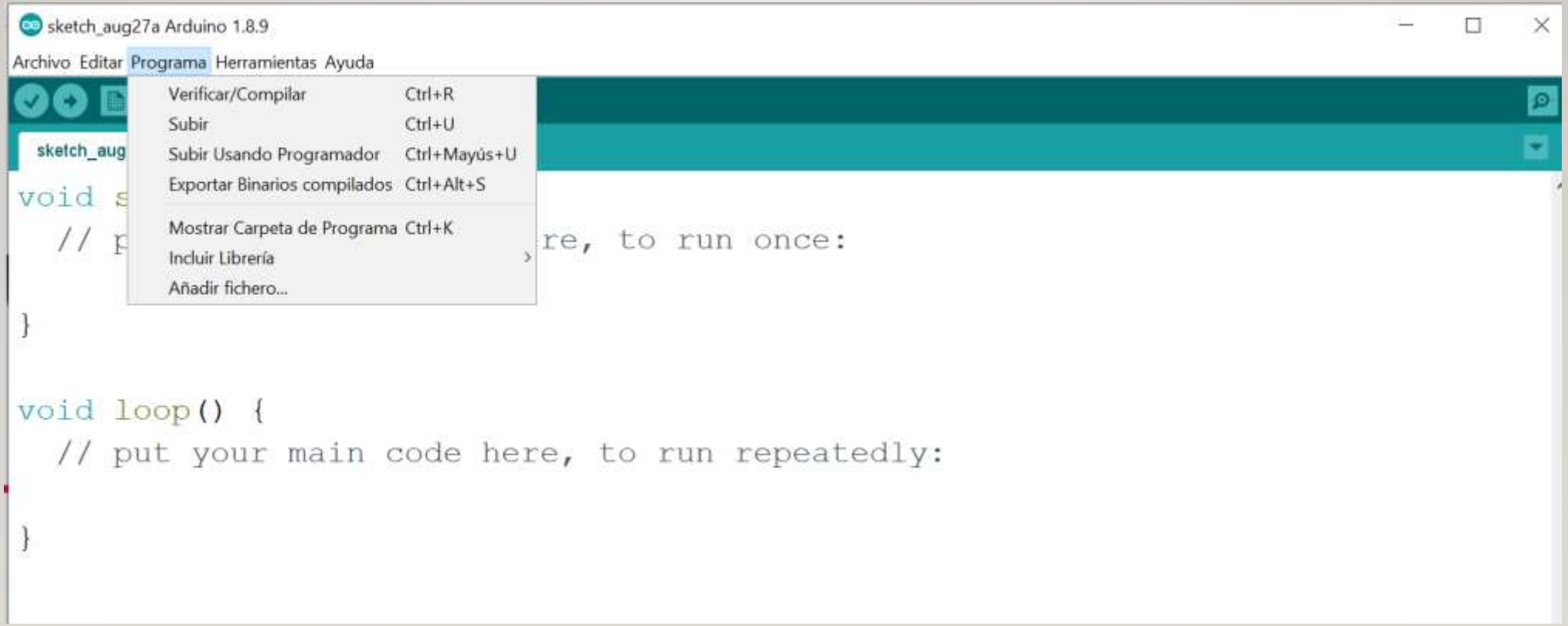
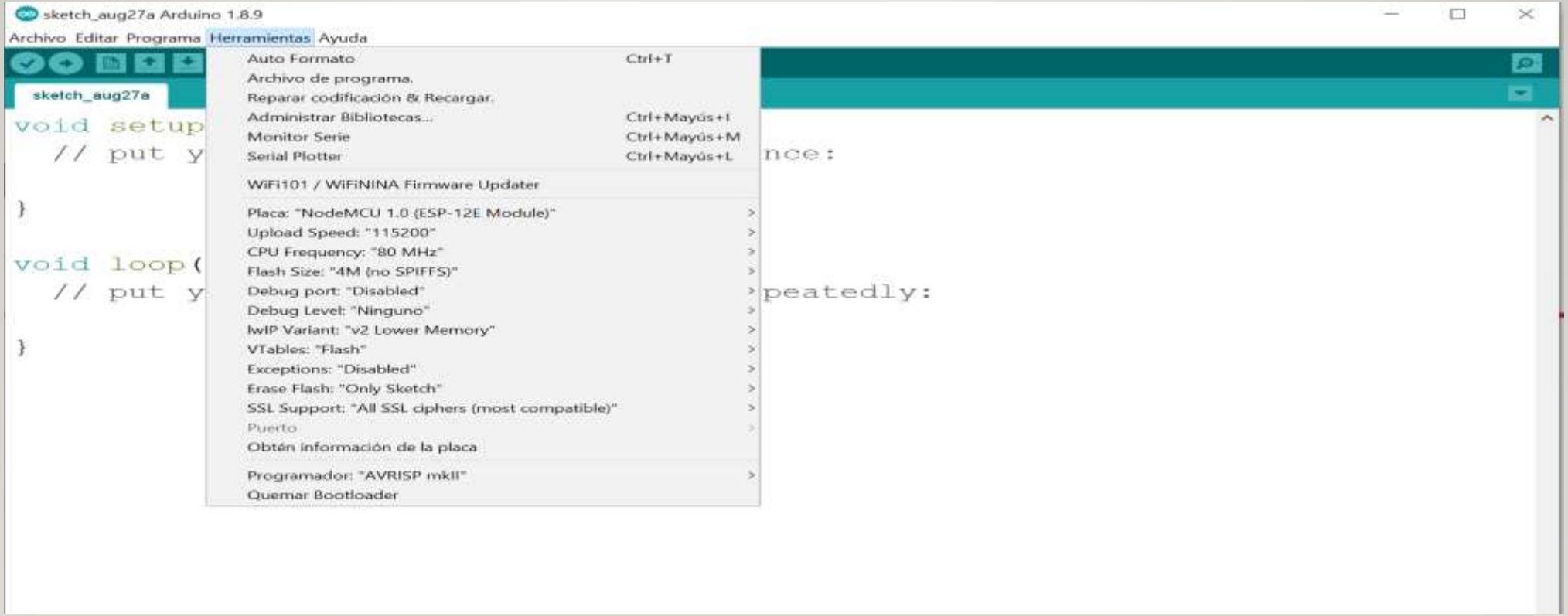
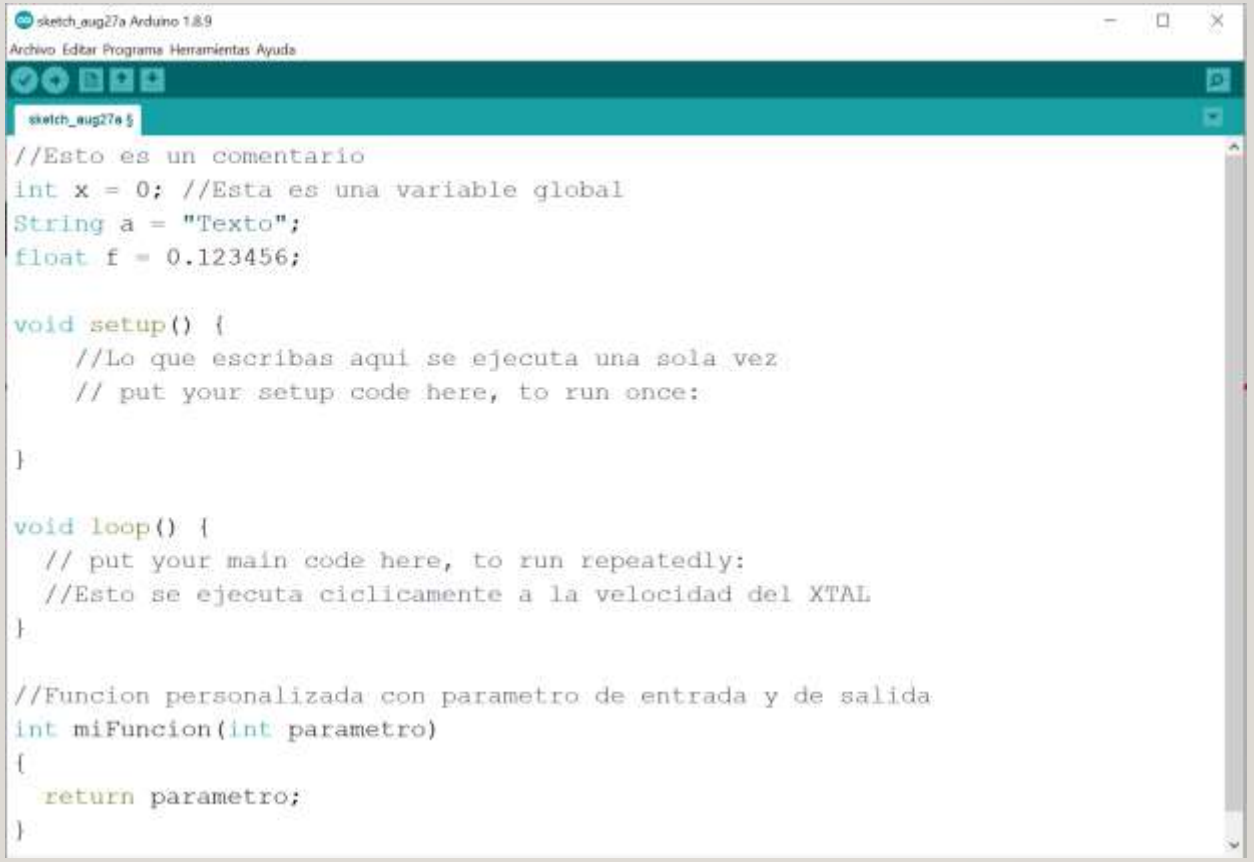


MENU DE ARDUINO

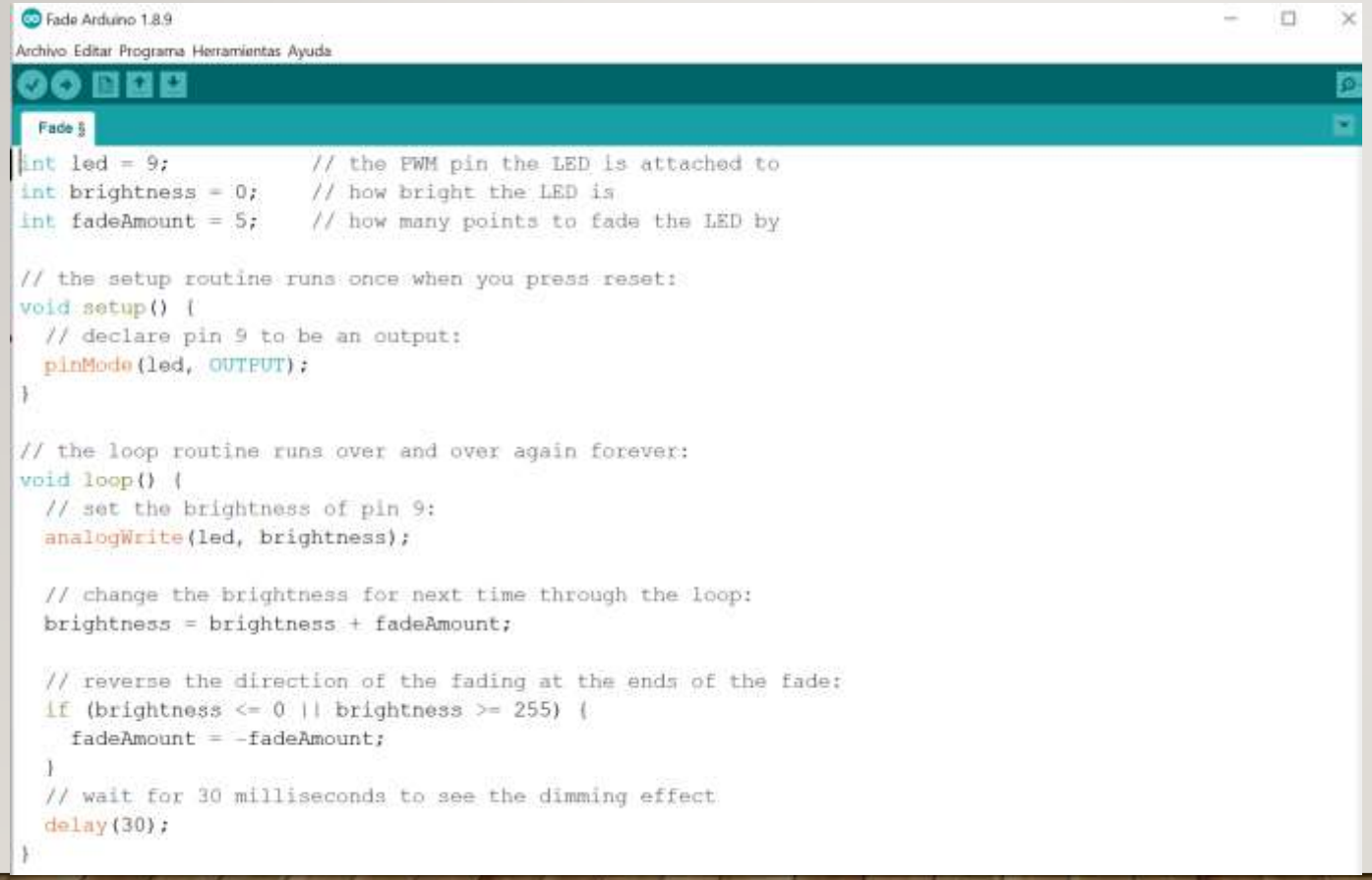


ESTRUCTURA DE UN PROGRAMA EN ARDUINO



EJEMPLO BÁSICO (BLINK)

EJEMPLO BÁSICO (FADE)




```
int led = 9;           // the PWM pin the LED is attached to
int brightness = 0;    // how bright the LED is
int fadeAmount = 5;    // how many points to fade the LED by

// the setup routine runs once when you press reset:
void setup() {
  // declare pin 9 to be an output:
  pinMode(led, OUTPUT);
}

// the loop routine runs over and over again forever:
void loop() {
  // set the brightness of pin 9:
  analogWrite(led, brightness);

  // change the brightness for next time through the loop:
  brightness = brightness + fadeAmount;

  // reverse the direction of the fading at the ends of the fade:
  if (brightness <= 0 || brightness >= 255) {
    fadeAmount = -fadeAmount;
  }
  // wait for 30 milliseconds to see the dimming effect
  delay(30);
}
```

EJEMPLO BÁSICO (ANALOGREADSERIAL)

PREGUNTAS

TRABAJO INVESTIGATIVO

- Realizar tres programas básicos diferentes a los mencionados en este video.
- Elabora nuevamente el programa "FADE" empleando ciclos For y While.
- Analiza cual es la diferencia entre el uso de delay(mS) y millis().