IT Ciao! In questo documento Word puoi trovare i codici che abbiamo utilizzato per realizzare i circuiti rappresentati nella nostra ultima presentazione del LAB 4. Se vuoi ricreare i circuiti, copia i codici da qui e incollali sul software Arduino IDE (link per il download: <https://www.arduino.cc/en/software>). Non dimenticarti di seguirci anche su YouTube, dove carichiamo video che spiegano i circuiti (link del canale YouTube: <https://www.youtube.com/channel/UCIXRpnzghK-d6ahtxNOkVqA>).

***EN Hi! In this Word document, you can find the codes we used to create the electric circuits shown in our last presentation, the LAB 4. If you want to recreate the circuits, copy the codes from here and paste them in the Arduino IDE software (link for the download:*** [***https://www.arduino.cc/en/software***](https://www.arduino.cc/en/software)***). Don’t forget to follow us on YouTube, where we upload videos that explain the circuits (link of our YouTube channel:*** [***https://www.youtube.com/channel/UCIXRpnzghK-d6ahtxNOkVqA***](https://www.youtube.com/channel/UCIXRpnzghK-d6ahtxNOkVqA)***)***

**CODICE 1 / FIRST CODE (ACCENSIONE MOTORE CON MONITOR SERIALE / SPINNING DC MOTOR WITH SERIAL MONITOR)**

int motorPin = 3;

void setup()

{

pinMode (motorPin, OUTPUT);

Serial.begin(9600);

while (! Serial);

Serial.println("Speed 0 to 255");

}

void loop()

{

if (Serial.available())

{

int speed = Serial.parseInt();

if (speed >= 0 && speed <= 255)

{

analogWrite(motorPin, speed);

}

delay(100);

}

}

**CODICE 2 / SECOND CODE (ACCENSIONE MOTORE AD INTERMITTENZA / SPINNING DC MOTOR ON INTERMITTENCE)**

const int motore=3;

void setup() {

  // initialize digital pin LED\_BUILTIN as an output.

  pinMode(motore, OUTPUT);

}

// the loop function runs over and over again forever

void loop() {

  digitalWrite(motore, HIGH);

  delay(1000);                      // wait for a second

  digitalWrite(motore, LOW);

  delay(1000);                      // wait for a second

}

**CODICE 3 / THIRD CODE (ACCENSIONE MOTORE CON SCHERMO LCD / SPINNING DC MOTOR WITH LCD SCREEN)**

/\*

  LiquidCrystal Library - Autoscroll

 Demonstrates the use of a 16x2 LCD display. The LiquidCrystal

 library works with all LCD displays that are compatible with the

 Hitachi HD44780 driver. There are many of them out there, and you

 can usually tell them by the 16-pin interface.

 This sketch demonstrates the use of the autoscroll()

 and noAutoscroll() functions to make new text scroll or not.

 The circuit:

 \* LCD RS pin to digital pin 12

 \* LCD Enable pin to digital pin 11

 \* LCD D4 pin to digital pin 5

 \* LCD D5 pin to digital pin 4

 \* LCD D6 pin to digital pin 3

 \* LCD D7 pin to digital pin 2

 \* LCD R/W pin to ground

 \* 10K or 100K potentiometer:

   \* ends to +5V and ground

   \* wiper to LCD VO pin (pin 3)

 Library originally added 18 Apr 2008

 by David A. Mellis

 library modified 5 Jul 2009

 by Limor Fried (http://www.ladyada.net)

 example added 9 Jul 2009

 by Tom Igoe

 modified 22 Nov 2010

 by Tom Igoe

 modified 7 Nov 2016

 by Arturo Guadalupi

 This example code is in the public domain.

 https://docs.arduino.cc/learn/electronics/lcd-displays#autoscroll-example

 https://github.com/arduino-libraries/LiquidCrystal

\*/

// include the library code:

#include <LiquidCrystal.h>

const int pot=A0;

float value;

// initialize the library by associating any needed LCD interface pin

// with the Arduino pin number it is connected to

const int rs = 12, en = 11, d4 = 5, d5 = 4, d6 = 3, d7 = 2;

LiquidCrystal lcd(rs, en, d4, d5, d6, d7);

void setup() {

  // set up the LCD's number of columns and rows:

  lcd.begin(16, 2);

  pinMode(pot,INPUT);

}

void loop() {

  // set the cursor to (0,0):

  lcd.setCursor(0, 0);

  // print from 0 to 9:

    value=analogRead(pot);

    lcd.print("Value is: ");

    lcd.print(value);

    delay(500);

}