Nome dell'azienda

Laboratorio DC motor Robotica

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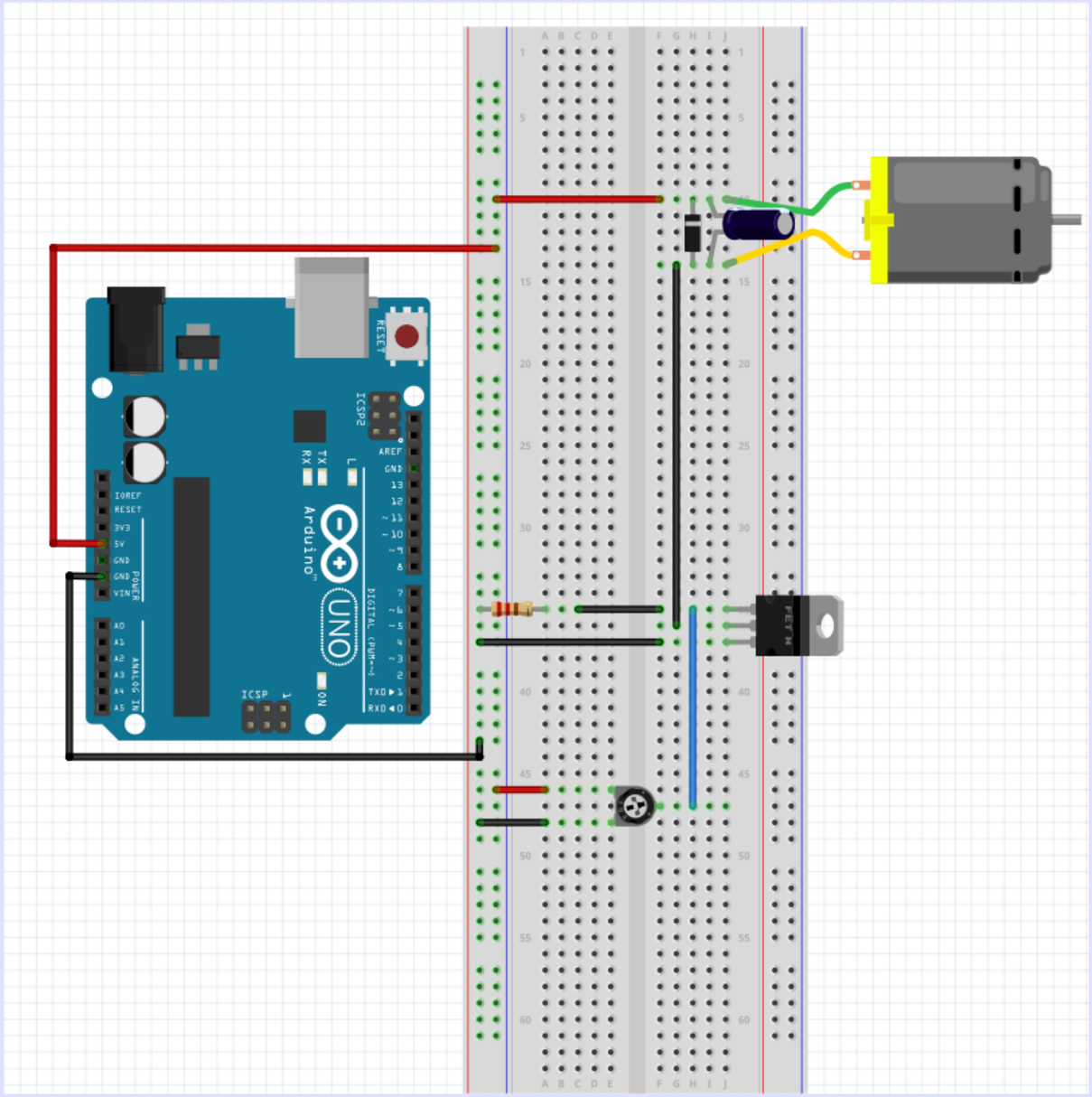
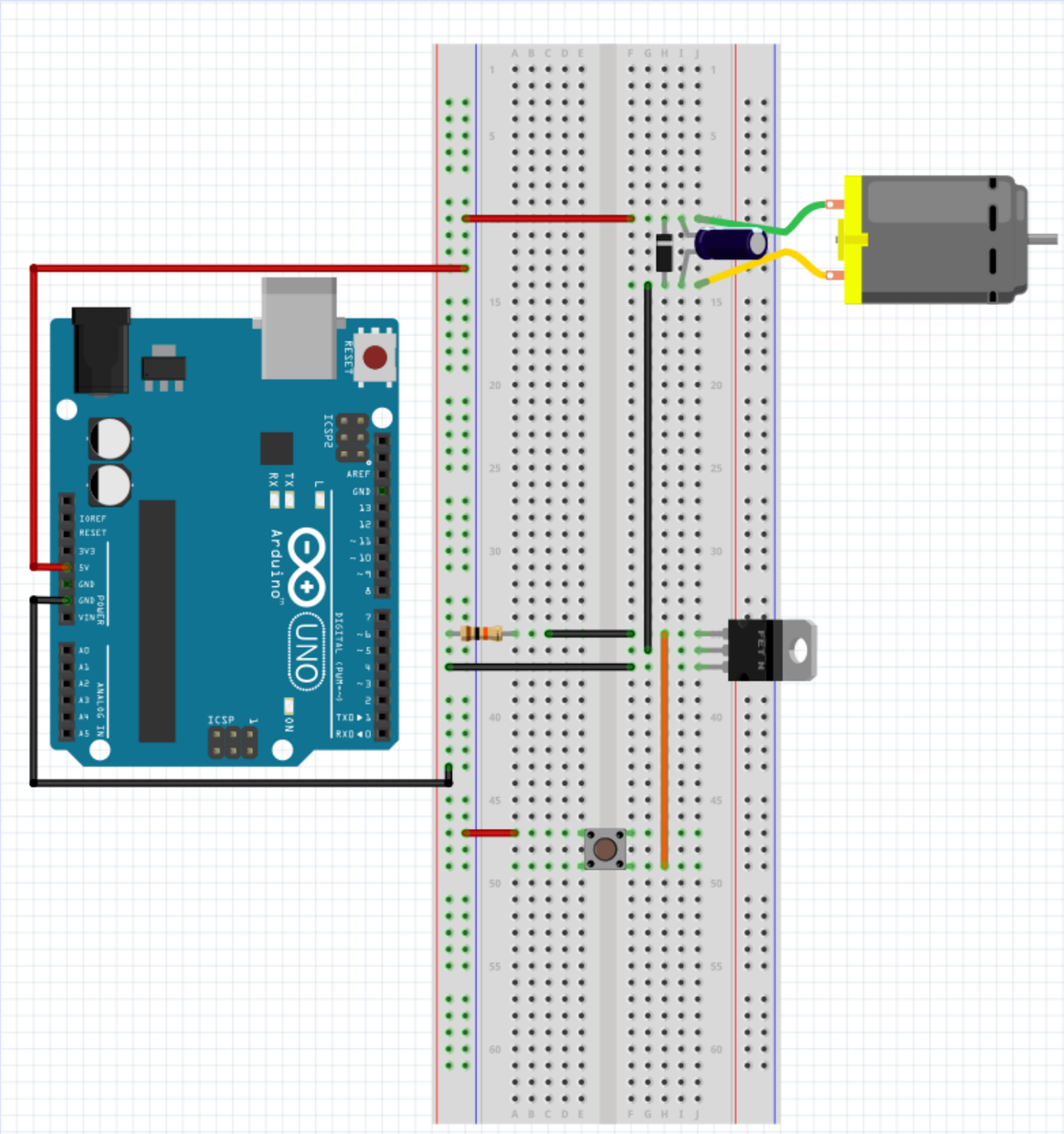
Indice

DC MOTOR CON POTENZIOMETRO

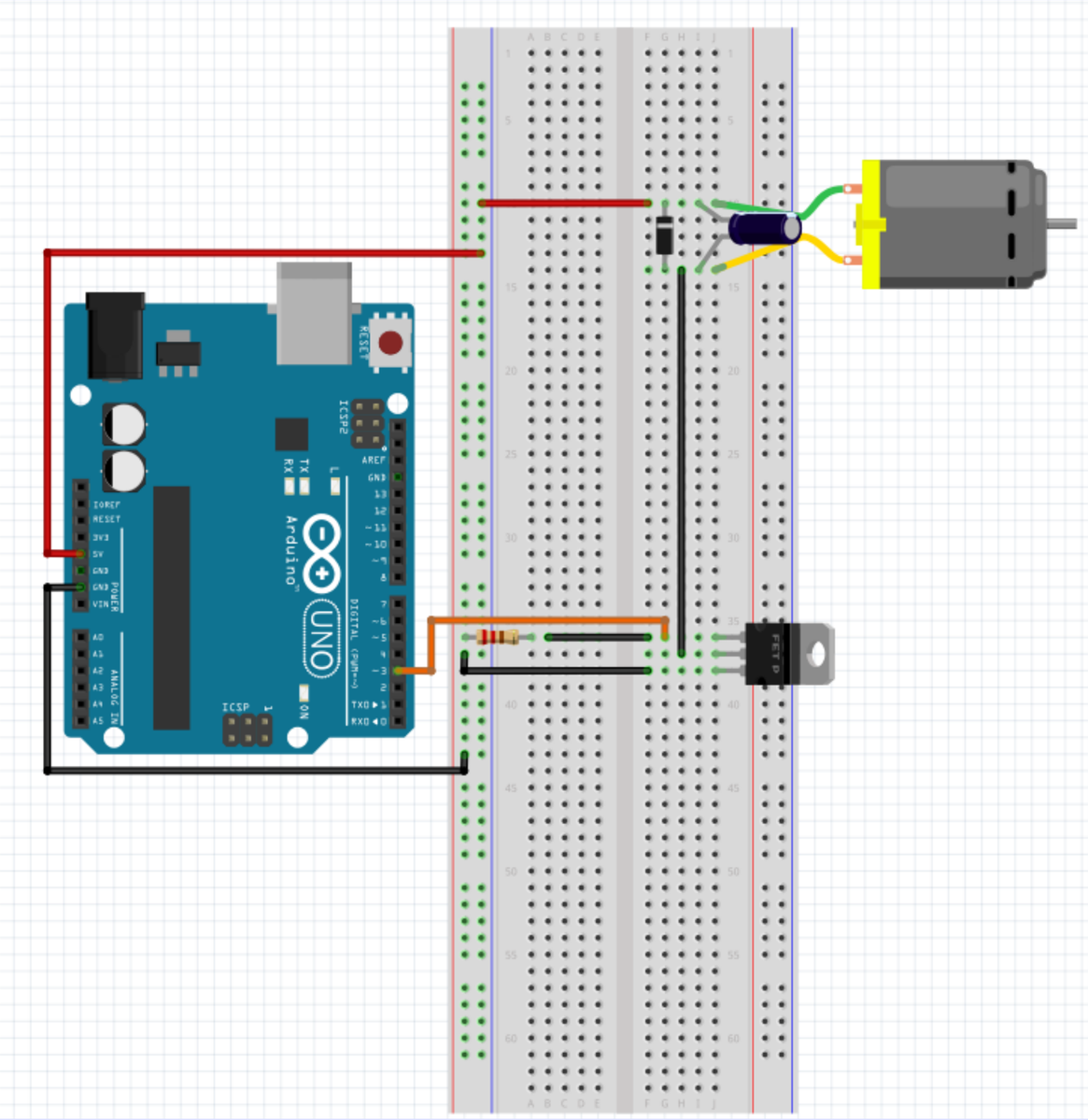



```
int motorPin = 3;
void setup()
{
pinMode (motorPin, OUTPUT);
Serial.begin(9600);
while (! Serial);
Serial.println("Speed 0 to 255");
}
void loop()
{
if (Serial.available())
{
int speed = Serial.parseInt();
if (speed >= 0 && speed <= 255)
{
analogWrite(motorPin, speed);
}
delay(1000);
}
}
```

DC MOTOR CON BOTTONE



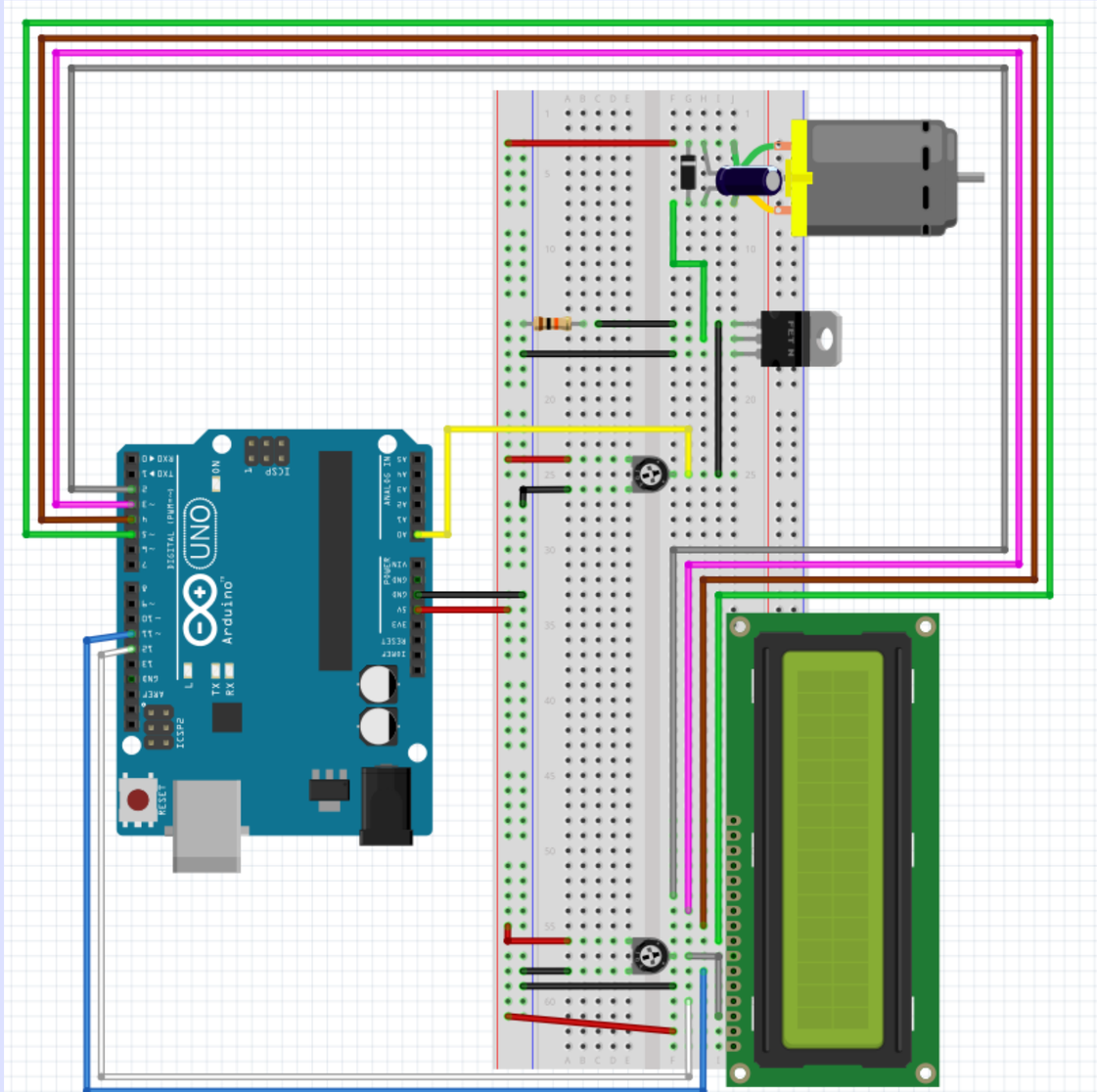
DC MOTOR CON BLINKING LED



```
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);  // turn the LED on (HIGH is the voltage level)
  delay(1000);                 // wait for a second
  digitalWrite(motore, LOW);   // turn the LED off by making the voltage LOW
  delay(1000);                 // wait for a second
}
```

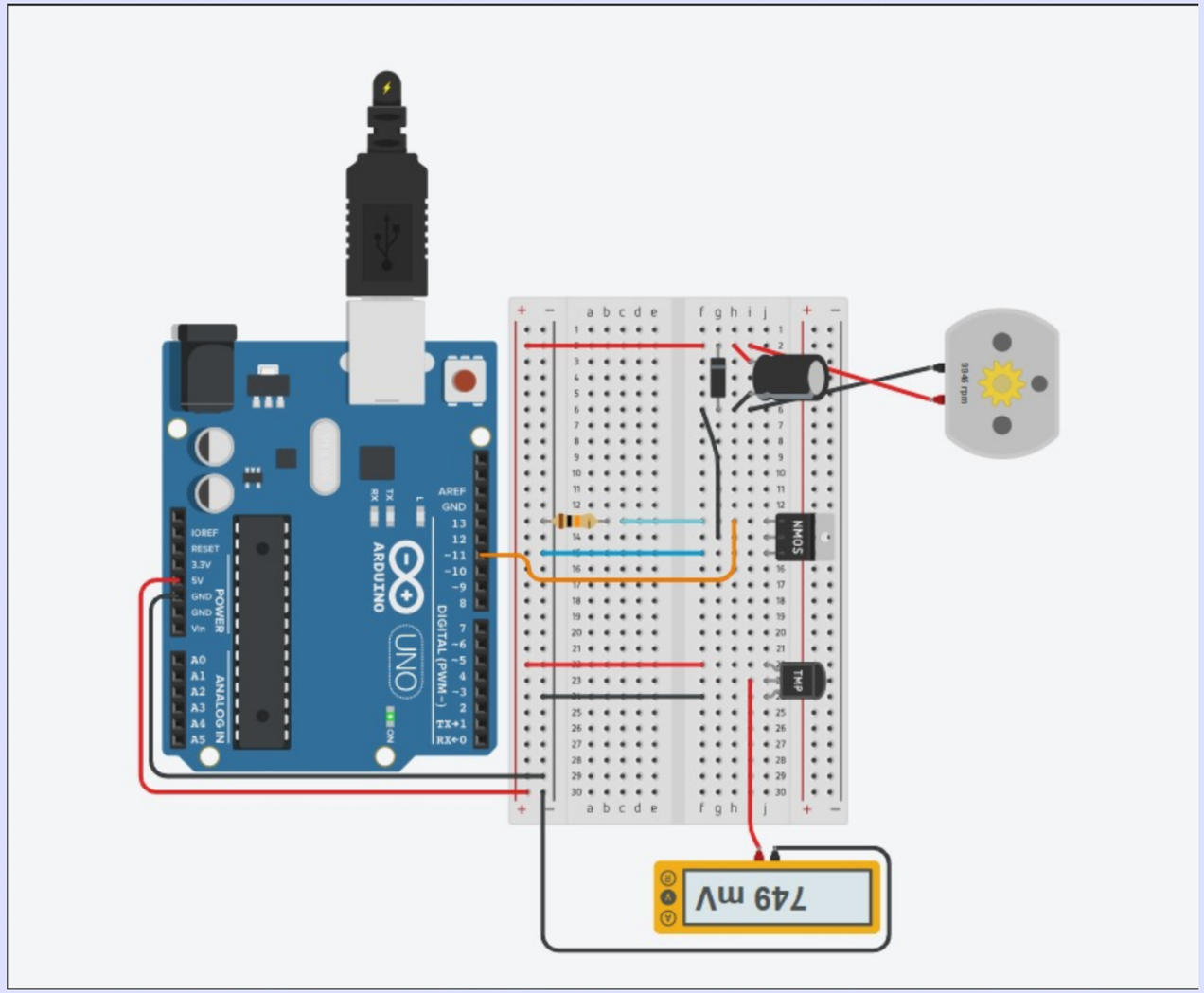
```
int motorPin = 3;
void setup()
{
pinMode (motorPin, OUTPUT);
Serial.begin(9600);
while (! Serial);
Serial.println("Speed 0 to 255");
}
void loop()
{
if (Serial.available())
{
int speed = Serial.parseInt();
if (speed >= 0 && speed <= 255)
{
analogWrite(motorPin, speed);
}
delay(100);
}
}
```

DC MOTOR CON SCHERMO LCD



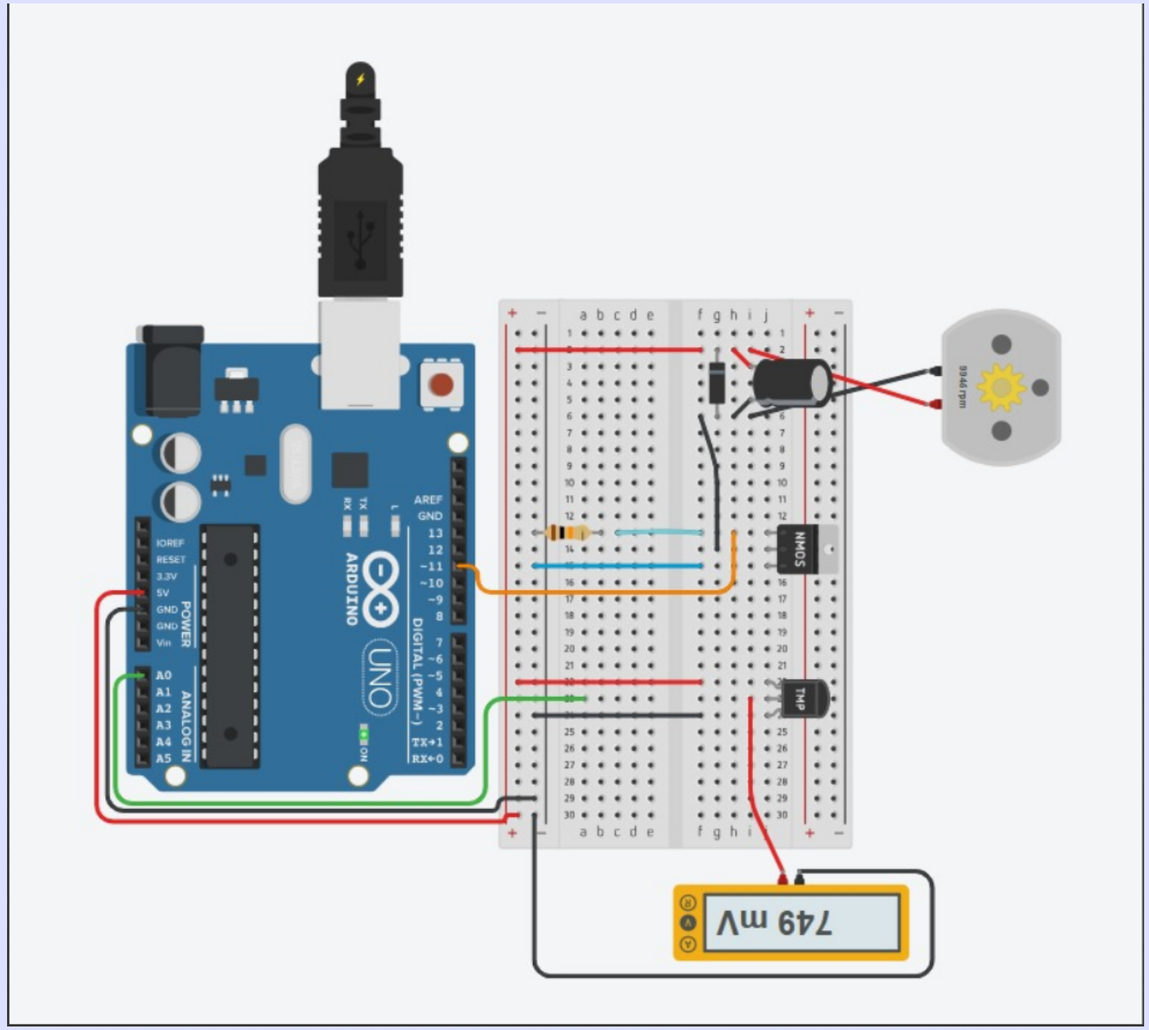
```
/*
LiquidCrystal Library - Autoscroll

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);
```

DC MOTOR AZIONATO CON LETTURA TEMPERATURA




```
void setup()
{
pinMode(A0, INPUT);
pinMode(11, OUTPUT);
}

void loop()
{
float value=analogRead(A0);
float volt=value*5/1023;

if (volt > 0,5){
digitalWrite(11, HIGH);
}
}
```

DC MOTOR AZIONATO CON LETTURA TEMPERATURA PROPORZIONALE




```
void setup()
{
pinMode(A1, INPUT);
pinMode(11, OUTPUT);
Serial.begin(9600);
}

void loop()
{
float value=analogRead(A1);
float volt=value*5/1023;
int speed=map(volt, 0, 0.8, 0, 255);
analogWrite(11, speed);
Serial.print(speed);
}
```