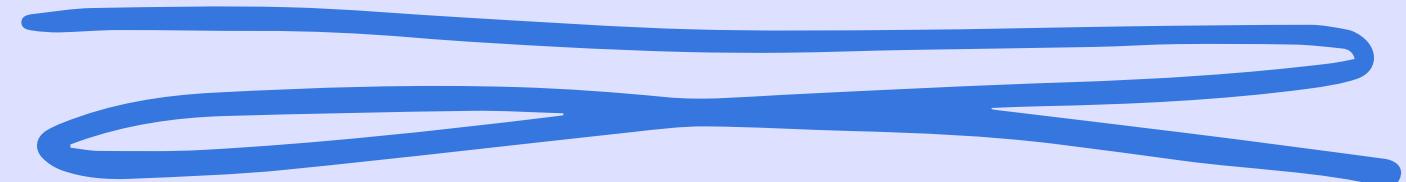




Nome dell'azienda

Laboratorio 2

Robotica



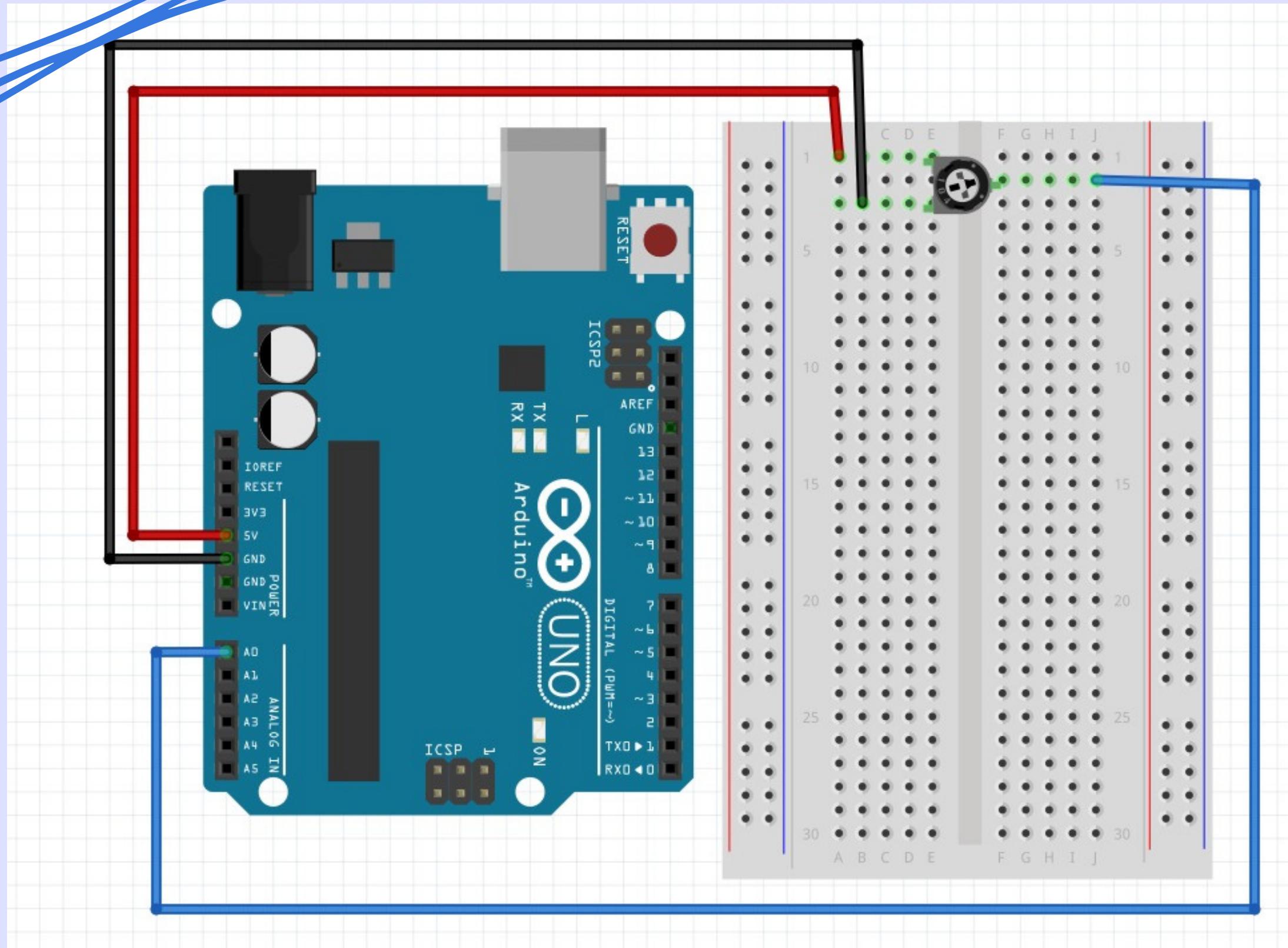
Joseph Molina

Daniel pensa



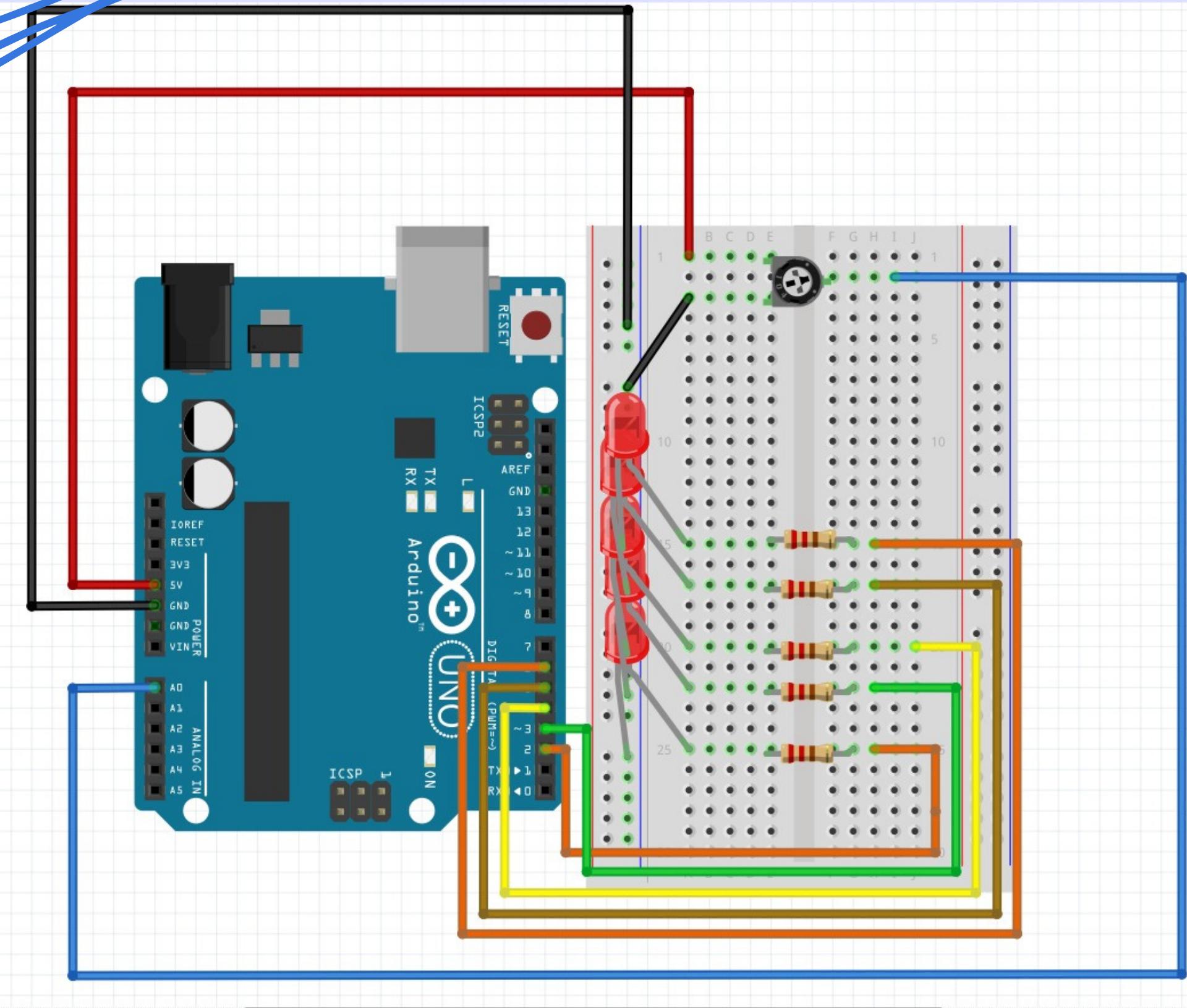
- Lettura potenziometro singolo
- striscia di LED azionata con potenziometro
- striscia di LED azionata con fotoresistor
- striscia di LED azionata con il sensore di umidità
- LED con PWM

Lettura potenziometro singolo



```
Int Pot=A0;  
Int Val = 0;  
Float Voltaggio;  
  
Void setup{  
PinMode(Pot,INPUT);  
Serial.Begin(9600);  
}  
  
Void Loop{  
Val = analogRead(Pot);  
Voltaggio= value*5/1023;  
Serial.Print(Voltaggio);  
}
```

Striscia di LED azionataa con potenziometro

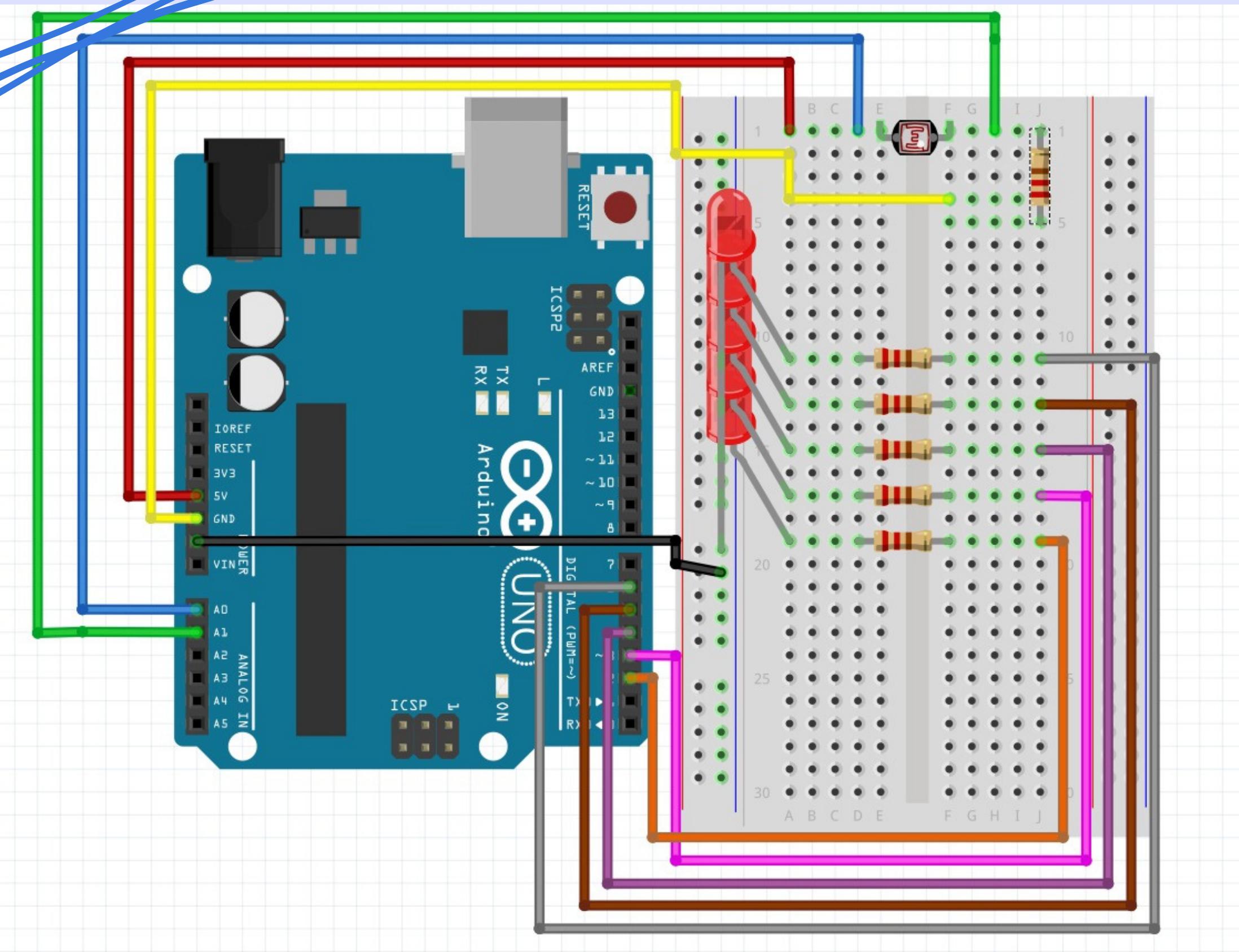


```
int cap1=A0;
int cap2=A1;
float value1;
float value2;
float voltaggio1;
float voltaggio2;
float diff;
const int analogPin = A0; // the pin that the
const int ledCount = 6; // the number of LEDs
int ledPins[] = {2, 3, 4, 5};

void setup() {
    // put your setup code here, to run once:
    pinMode(cap1,INPUT);
    pinMode(cap2,INPUT);
    Serial.begin(9600);
}

void loop() {
    // your main code here, to run repeatedly:
    value1=analogRead(cap1);
    value2=analogRead(cap2);
    voltaggio1=value1*5/1023;
    voltaggio2=value2*5/1023;
    diff=voltaggio1-voltaggio2;
    Serial.print(voltaggio1);
    Serial.print(" , ");
    Serial.print(voltaggio2);
    Serial.print(" , ");
    Serial.println(diff);
    delay(500);
}
```

Striscia di LED azionataa con fotoresistore

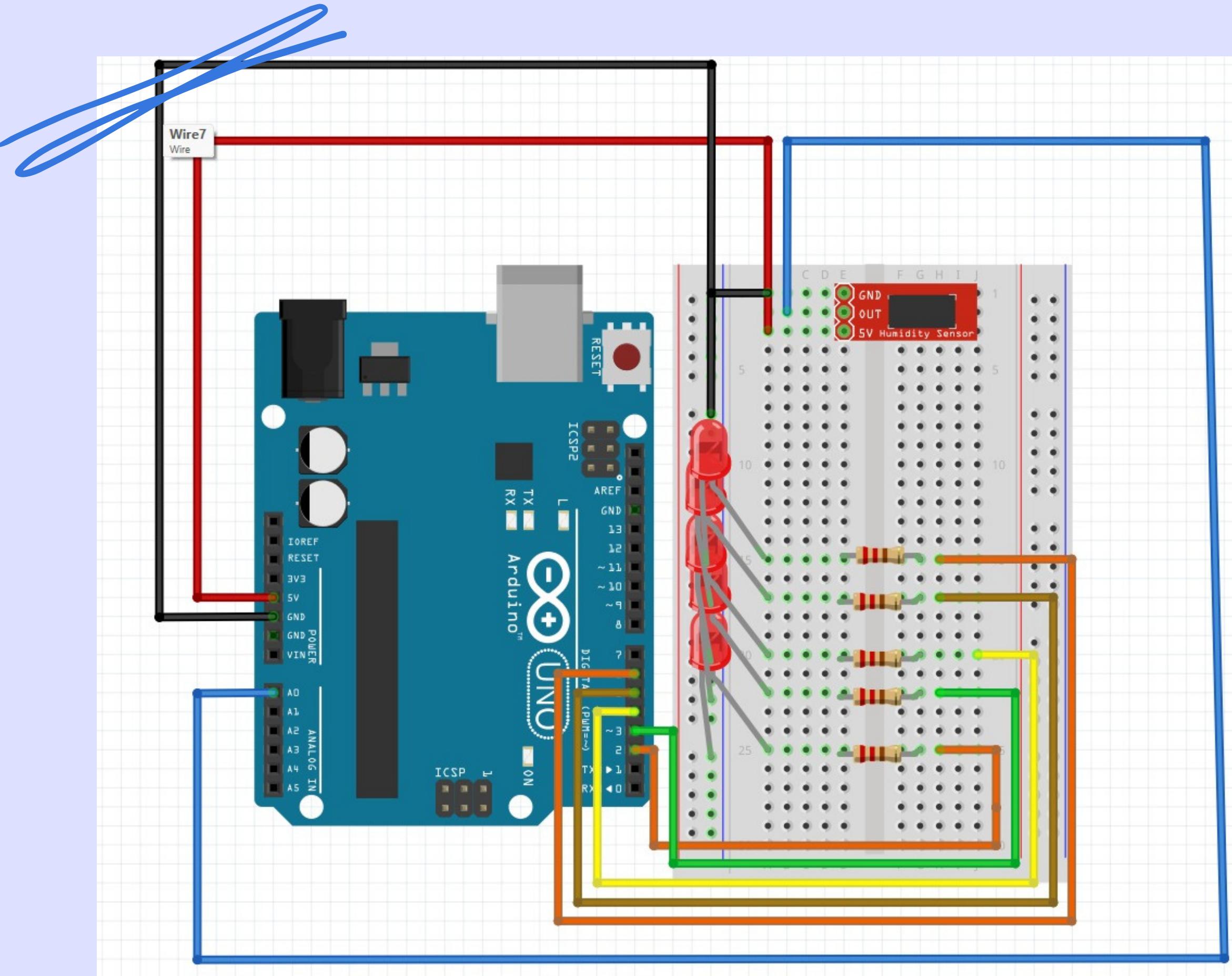


```
int cap1=A0;
int cap2=A1;
float value1;
float value2;
float voltaggio1;
float voltaggio2;
float diff;
const int analogPin = A0; // the pin that the potentiometer is connected to
const int ledCount = 6; // the number of LEDs in the strip
int ledPins[] = {2, 3, 4, 5};

void setup() {
    // put your setup code here, to run once:
    pinMode(cap1,INPUT);
    pinMode(cap2,INPUT);
    Serial.begin(9600);
}

void loop() {
    // your main code here, to run repeatedly:
    value1=analogRead(cap1);
    value2=analogRead(cap2);
    voltaggio1=value1*5/1023;
    voltaggio2=value2*5/1023;
    diff=voltaggio1-voltaggio2;
    Serial.print(voltaggio1);
    Serial.print(" , ");
    Serial.print(voltaggio2);
    Serial.print(" , ");
    Serial.println(diff);
    delay(500);
}
```

Striscia di LED azionataa con il sensore di humidità



```
int cap1=A0;
int cap2=A1;
float value1;
float value2;
float voltaggio1;
float voltaggio2;
float diff;
const int analogPin = A0; // the pin that
const int ledCount = 6; // the number of
int ledPins[] = {2, 3, 4, 5};

void setup() {
    // put your setup code here, to run on
    pinMode(cap1,INPUT);
    pinMode(cap2,INPUT);
    Serial.begin(9600);
}

void loop() {
    // your main code here, to run repeat
    value1=analogRead(cap1);
    value2=analogRead(cap2);
    voltaggio1=value1*5/1023;
    voltaggio2=value2*5/1023;
    diff=voltaggio1-voltaggio2;
    Serial.print(voltaggio1);
    Serial.print(" , ");
    Serial.print(voltaggio2);
    Serial.print(" , ");
    Serial.println(diff);
    delay(500);
}
```

```
int led = 3;      // the PWM pin the  
LED is attached to  
int brightness = 0;  
int fadeAmount = 5;
```

```
void setup() {  
pinMode(led, OUTPUT);  
Serial.begin(9600);  
}  
  
void loop() {  
analogWrite(led, brightness);  
value=analogRead(led);  
Serial.println(value);  
brightness = brightness +  
fadeAmount;  
  
if (brightness <= 0 || brightness >=  
255) {  
fadeAmount = -fadeAmount;  
}
```

