



Prof. José Camargo



**GOVERNO DO ESTADO
DE SÃO PAULO**

Curso: Tecnologia em Análise e Desenvolvimento de Sistemas - AMS

Período: 5º Ano

Disciplina: Sistemas Distribuídos Aplicado à Internet das Coisas

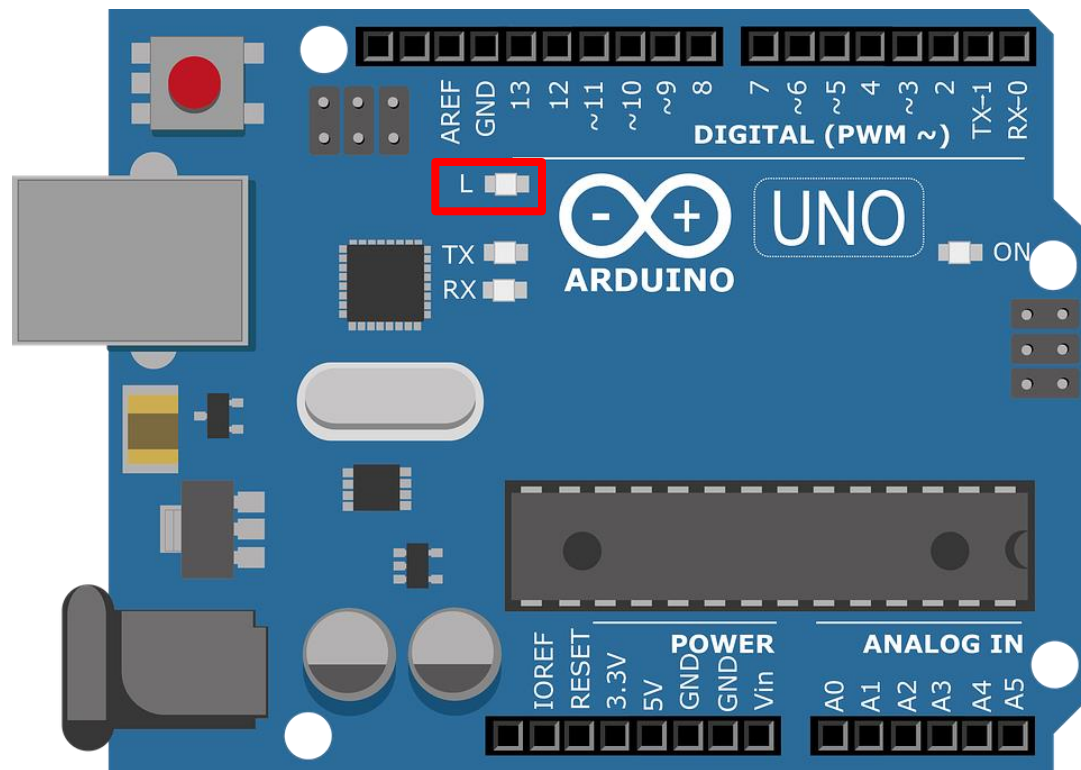
Professor: Profa. Dra. Ligia Rodrigues Prete

E-mail: ligia.prete@fatec.sp.gov.br

03 – LED interno

Projeto 1 – LED Interno

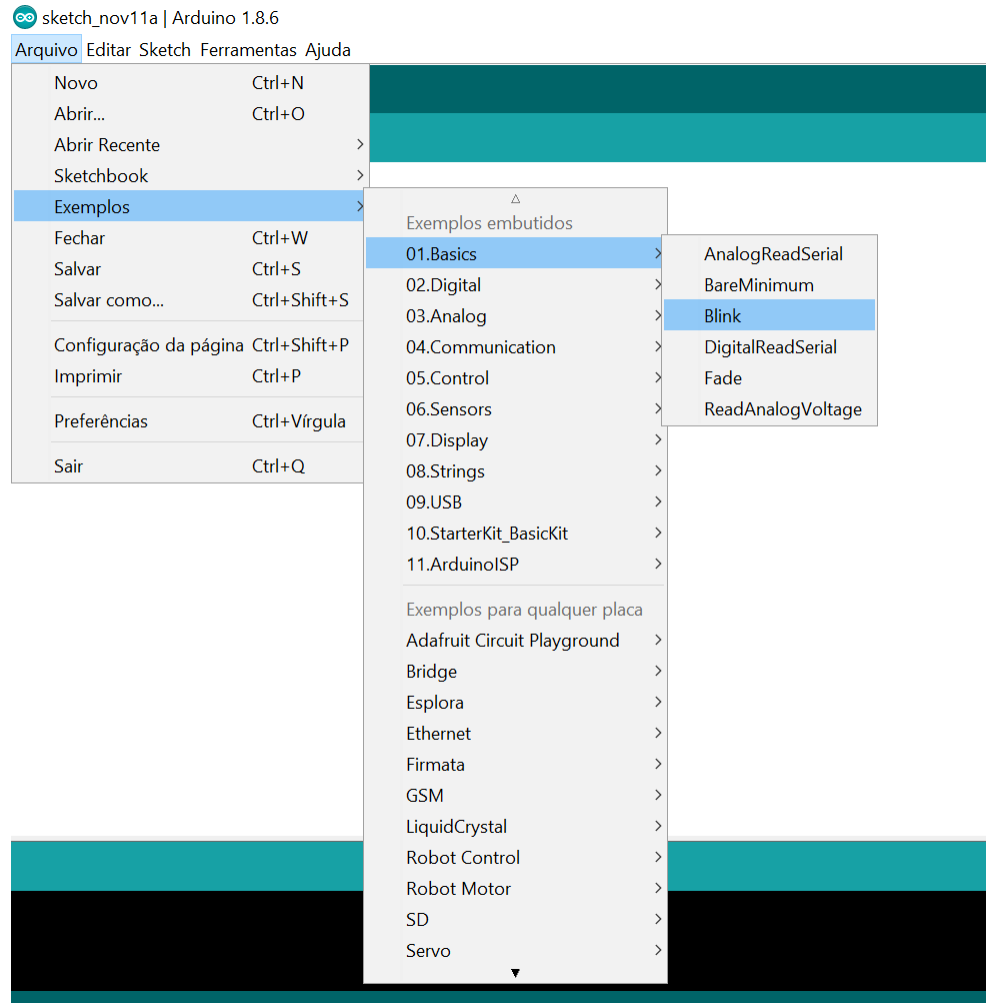
- Realizar o acionamento do LED_BUILTIN da placa de Arduino.



Projeto 1 – LED Interno

Microcontroller	ATmega328P
Operating Voltage	5V
Input Voltage (recommended)	7-12V
Input Voltage (limit)	6-20V
Digital I/O Pins	14 (of which 6 provide PWM output)
PWM Digital I/O Pins	6
Analog Input Pins	6
DC Current per I/O Pin	20 mA
DC Current for 3.3V Pin	50 mA
Flash Memory	32 KB (ATmega328P) of which 0.5 KB used by bootloader
SRAM	2 KB (ATmega328P)
EEPROM	1 KB (ATmega328P)
Clock Speed	16 MHz
LED_BUILTIN	13
Length	68.6 mm
Width	53.4 mm
Weight	25 g

Sketch de Exemplo



Sketch de Exemplo

Blink

<https://www.arduino.cc/en/Main/Products>

modified 8 May 2014

by Scott Fitzgerald

modified 2 Sep 2016

by Arturo Guadalupi

modified 8 Sep 2016

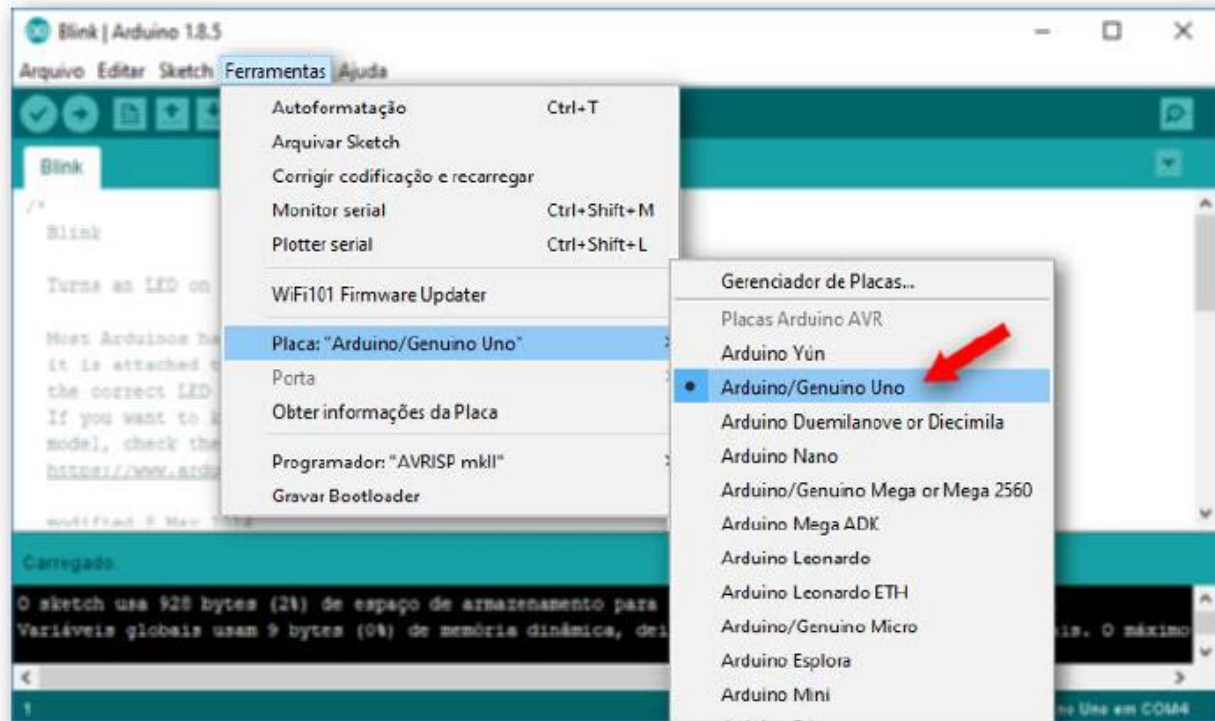
by Colby Newman

This example code is in the public domain.

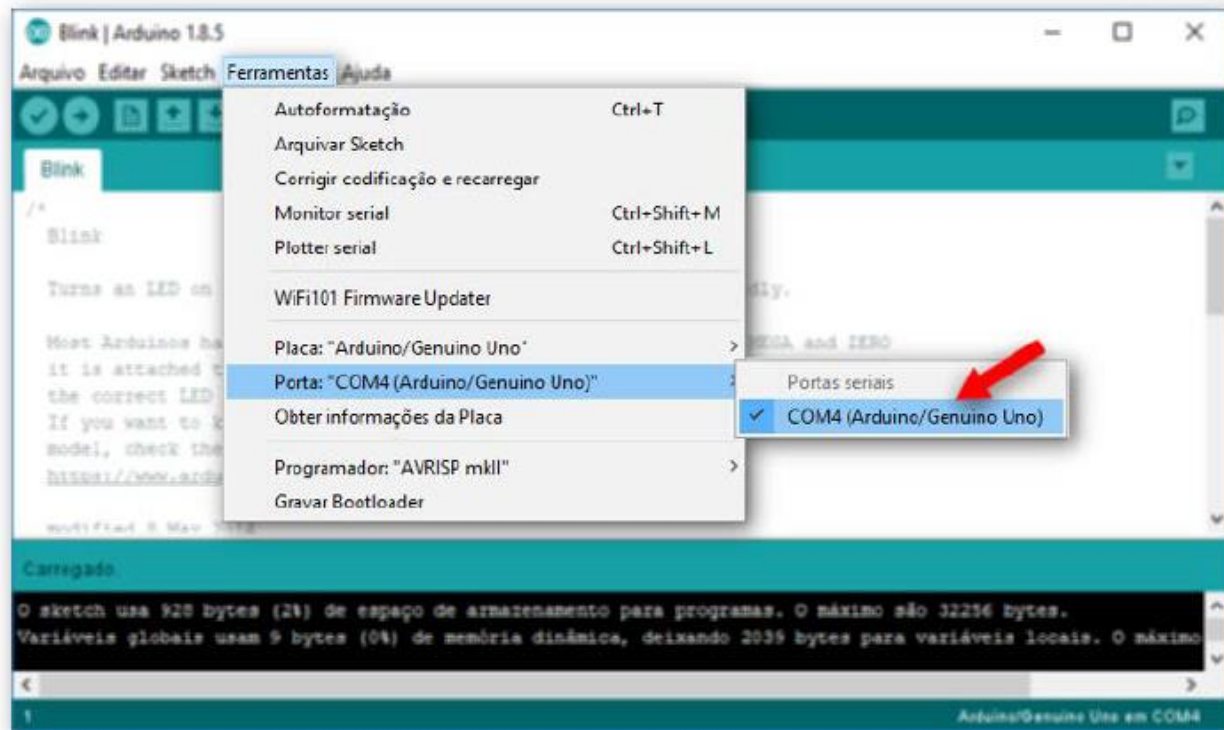
<http://www.arduino.cc/en/Tutorial/Blink>

```
*/  
  
// the setup function runs once when you press reset or power the board  
void setup() {  
  // initialize digital pin LED_BUILTIN as an output.  
  pinMode(LED_BUILTIN, OUTPUT);  
}  
  
// the loop function runs over and over again forever  
void loop() {  
  digitalWrite(LED_BUILTIN, HIGH); // turn the LED on (HIGH is the voltage level)  
  delay(1000); // wait for a second  
  digitalWrite(LED_BUILTIN, LOW); // turn the LED off by making the voltage LOW  
  delay(1000); // wait for a second  
}
```

Escolha a Placa



Escolha a Porta



Verifique e Carregue o Sketch para a placa do Arduino

