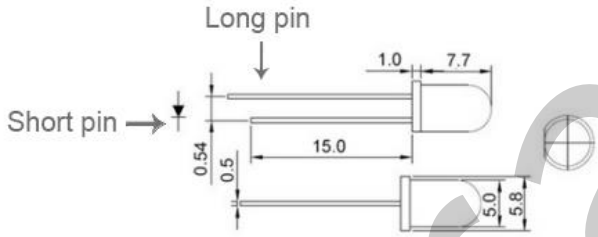
LED blink

Overview

This example shows the simplest thing you can do with an Arduino to see physical output: it blinks an LED.

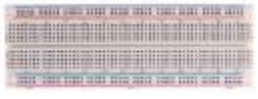
Specification



Pin definition

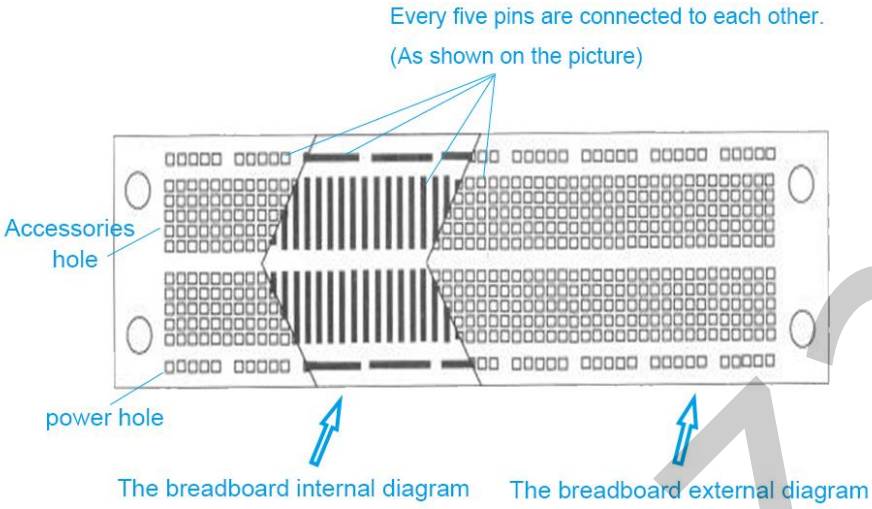
Is the definition of LED pin
Long pin -> + (VCC)
Short pin -> - (GND)

Hardware required

Material diagram	Material name	Number
	220/330Ω resistor	1
	LED	1
	USB Cable	1
	UNO R3	1
	Breadboard	1

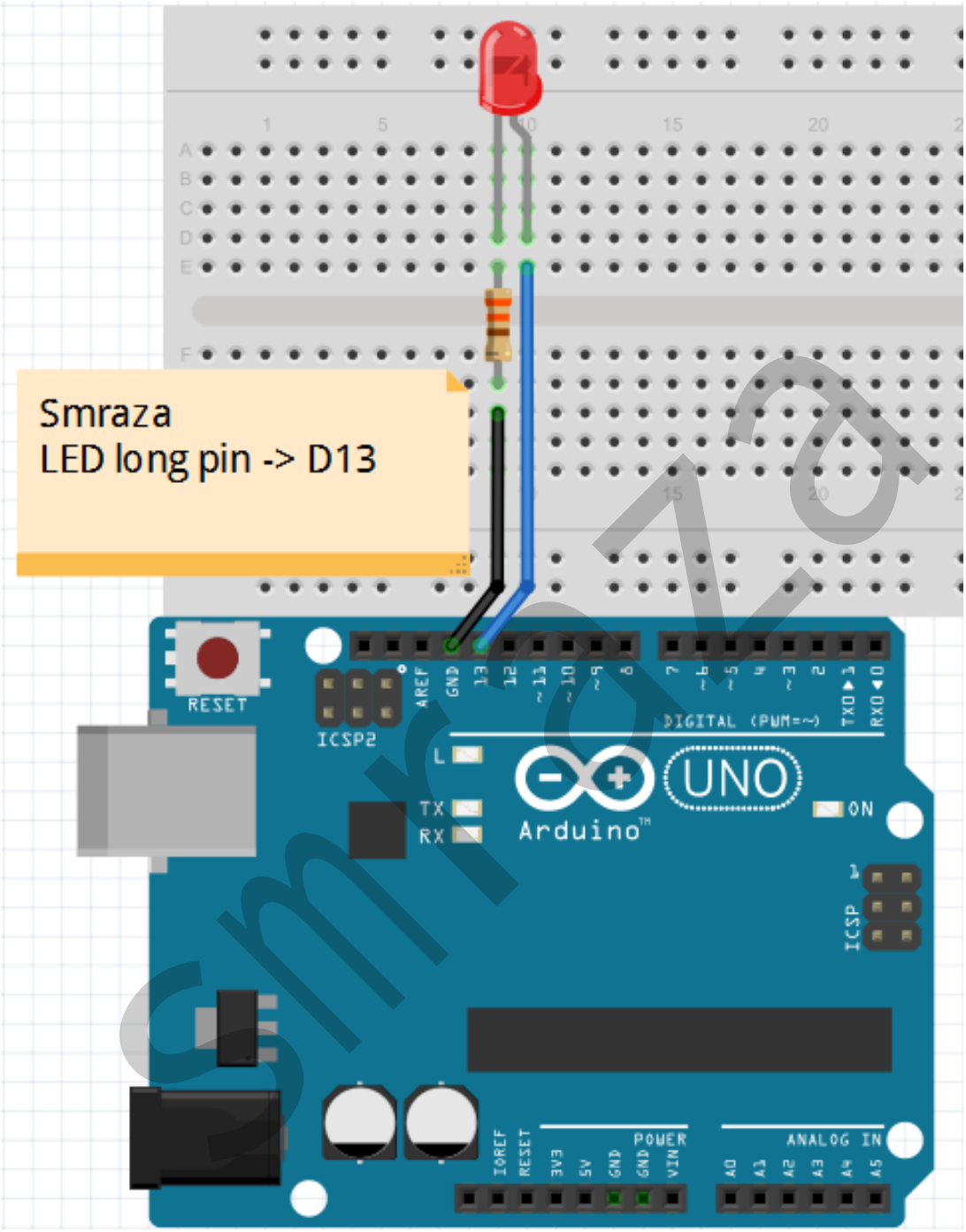
	Jumper wires	Several

Bread board schematic



All the tie points (indicated in the picture) of the different colors are connected together.

Connection diagram



Note：The longest LED of the pin is connected to the digital signal port 13(D13).

Sample code

Note: sample code under the **Sample code** folder

```
// Pin 13 has an LED connected on most Arduino boards.
// give it a name:
int led = 13;
```

```
// the setup routine runs once when you press reset:
void setup() {
  // initialize the digital pin as an output.
  pinMode(led, OUTPUT);
}

// the loop routine runs over and over again forever:
void loop() {
  digitalWrite(led, HIGH);   // turn the LED on (HIGH is the voltage level)
  delay(1000);               // wait for a second
  digitalWrite(led, LOW);    // turn the LED off by making the voltage LOW
  delay(1000);               // wait for a second
}
```

Language reference

Tips：click on the following name to jump to the web page.
If you fail to open, use the Adobe reader to open this document.

int
setup()
pinMode()
OUTPUT
loop()
HIGH
LOW
digitalWrite()
digitalRead()
delay()
; (semicolon)
{} (curly braces)
= (assign)
// (comment)

Application effect

Turns on an LED on for one second, then off for one second, repeatedly.