

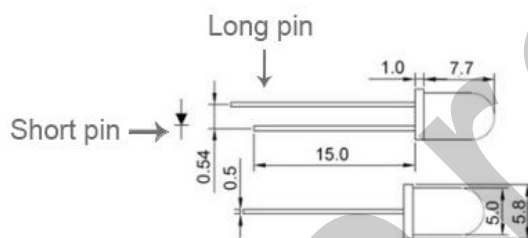
LED blink

Overview



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






Specification



Pin definition

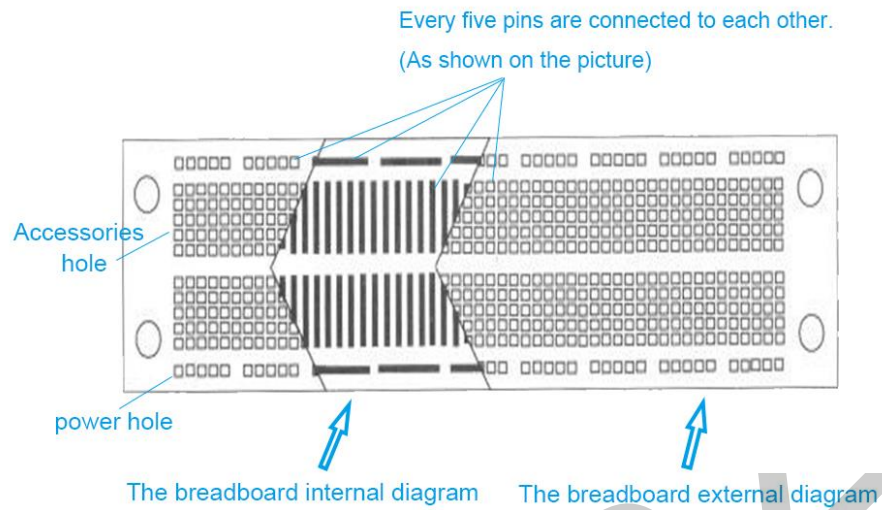
LED
 Long pin -> +5V
 Short pin -> GND

Hardware required

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

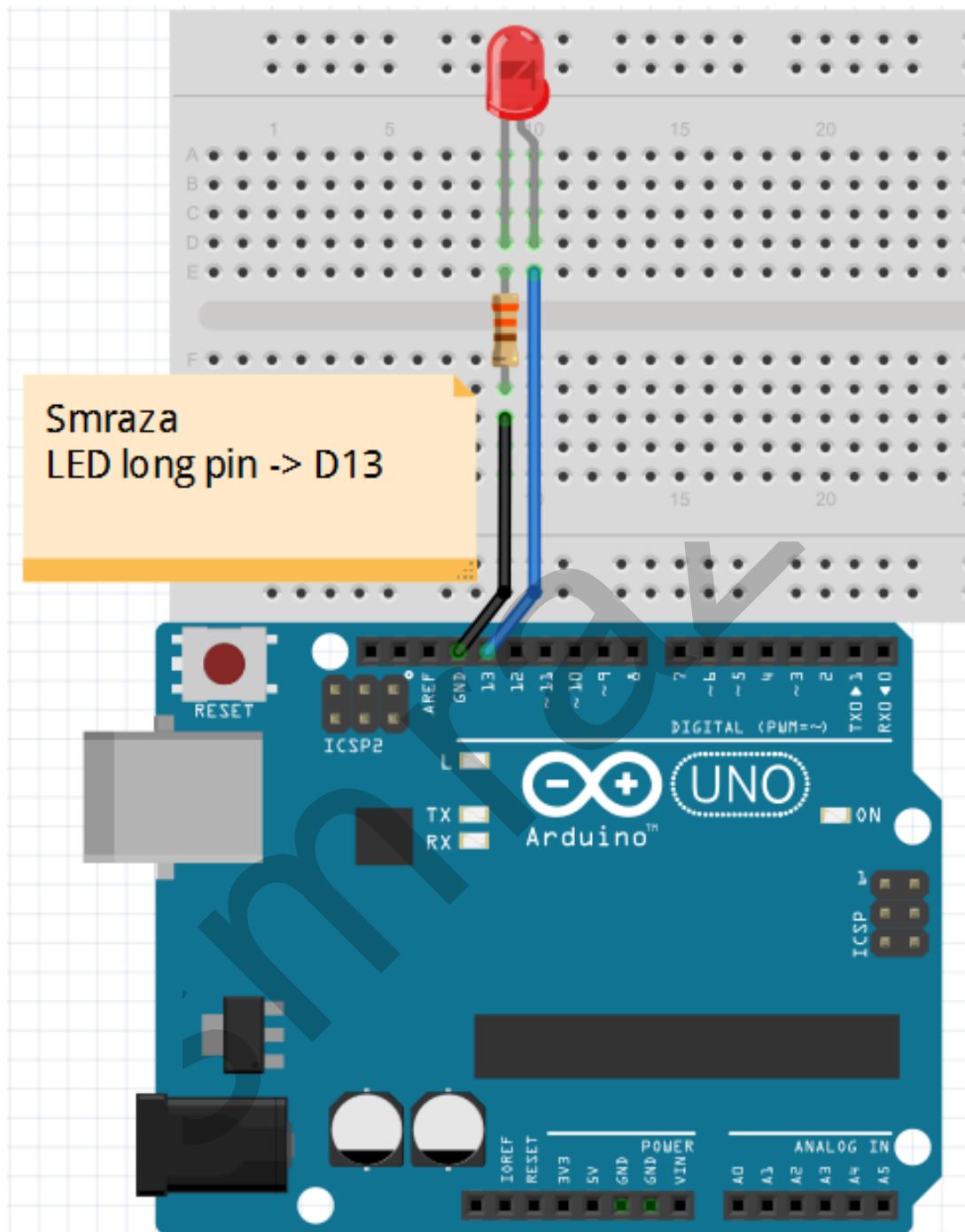
	Jumper wires	Several
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Bread board schematic



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;
```

V1.0

```
// 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.