digitalWrite()

[Digital I/O]

Description

Write a `HIGH` or a `LOW` value to a digital pin.

If the pin has been configured as an `OUTPUT` with `pinMode()`, its volt will be set to the corresponding value: 5V (or 3.3V on 3.3V boards) `HIGH`, 0V (ground) for `LOW`.

If the pin is configured as an `INPUT`, `digitalWrite()` will enable (`HIG` or disable (`LOW`) the internal pullup on the input pin. It is recommended to set the `pinMode()` to `INPUT_PULLUP` to enable the internal pull-up resistor. See the Digital Pins tutorial for more information.

If you do not set the `pinMode()` to `OUTPUT`, and connect an LED to a when calling `digitalWrite(HIGH)`, the LED may appear dim. Withou explicitly setting `pinMode()`, `digitalWrite()` will have enabled the internal pull-up resistor, which acts like a large current-limiting resistor.

LANGUAGE
FUNCTIONS
VARIABLES
STRUCTURE
LIBRARIES
IOT CLOUD API
GLOSSARY

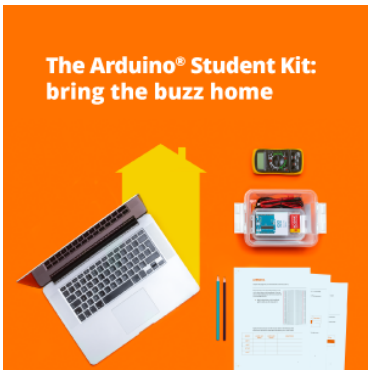
Syntax

```
digitalWrite(pin, value)
```

Parameters

`pin`: the Arduino pin number.

`value`: `HIGH` or `LOW`.



Last Revision: 2019/06/25

Last Build: 2021/04/15

Example Code

The code makes the digital pin 13 an `OUTPUT` and toggles it by alternating between `HIGH` and `LOW` at one second pace.

```
void setup() {
  pinMode(13, OUTPUT);    // sets the digital pin 13 as output
}

void loop() {
  digitalWrite(13, HIGH); // sets the digital pin 13 on
  delay(1000);            // waits for a second
  digitalWrite(13, LOW);  // sets the digital pin 13 off
  delay(1000);            // waits for a second
}
```

Notes and Warnings

The analog input pins can be used as digital pins, referred to as A A1, etc. The exception is the Arduino Nano, Pro Mini, and Mini's A6 and A7 pins, which can only be used as analog inputs.

See also

EXAMPLE Description of the digital pins