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# digitalWrite()

## Description

Write a HIGH ([//www.arduino.cc/en/Reference/Constants](https://www.arduino.cc/en/Reference/Constants)) or a LOW ([//www.arduino.cc/en/Reference/Constants](https://www.arduino.cc/en/Reference/Constants)) value to a digital pin.

If the pin has been configured as an OUTPUT with `pinMode()` ([//www.arduino.cc/en/Reference/PinMode](https://www.arduino.cc/en/Reference/PinMode)), its voltage will be set to the corresponding value: 5V (or 3.3V on 3.3V boards) for HIGH, 0V (ground) for LOW.

If the pin is configured as an INPUT, `digitalWrite()` will enable (HIGH) or disable (LOW) the internal pullup on the input pin. It is recommended to set the `pinMode()` ([//www.arduino.cc/en/Reference/PinMode](https://www.arduino.cc/en/Reference/PinMode)) to `INPUT_PULLUP` ([//www.arduino.cc/en/Reference/Constants](https://www.arduino.cc/en/Reference/Constants)) to enable the internal pull-up resistor. See the digital pins tutorial ([//www.arduino.cc/en/Tutorial/DigitalPins](https://www.arduino.cc/en/Tutorial/DigitalPins)) for more information.

NOTE: If you do not set the `pinMode()` to OUTPUT, and connect an LED to a pin, when calling `digitalWrite(HIGH)`, the LED may appear dim. Without explicitly setting `pinMode()`, `digitalWrite()` will have enabled the internal pull-up resistor, which acts like a large current-limiting resistor.

## Syntax

`digitalWrite(pin, value)`

## Parameters

`pin`: the pin number

`value`: HIGH ([//www.arduino.cc/en/Reference/Constants](https://www.arduino.cc/en/Reference/Constants)) or LOW ([//www.arduino.cc/en/Reference/Constants](https://www.arduino.cc/en/Reference/Constants))

## Returns

none

## Example

```

(https://www.arduino.cc)
int ledPin = 13;                                // LED connected to digital pin 13

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

void loop()
{
    digitalWrite(ledPin, HIGH);    // sets the LED on
    delay(1000);                  // waits for a second
    digitalWrite(ledPin, LOW);    // sets the LED off
    delay(1000);                  // waits for a second
}

```

Sets pin 13 to HIGH, makes a one-second-long delay, and sets the pin back to LOW.

#### Note

The analog input pins can be used as digital pins, referred to as A0, A1, etc.

See also

- `pinMode (//www.arduino.cc/en/Reference/PinMode)()`
- `digitalRead (//www.arduino.cc/en/Reference/DigitalRead)()`
- Tutorial: Digital Pins ([//www.arduino.cc/en/Tutorial/DigitalPins](https://www.arduino.cc/en/Tutorial/DigitalPins))

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