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digitalWrite()

Description

Write a HIGH (//www.arduino.cc/en/Reference/Constants) or a LOW (//www.arduino.cc/en/Reference/Constants) value to a digital

If the pin has been configured as an OUTPUT with pinMode (//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, OV (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)() to INPUT_PULLUP (//www.arduino.cc/en/Reference/Constants) to enable the internal pull-up resistor. See the digital pins tutorial (//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 currentlimiting resistor.

Syntax

digitalWrite(pin, value)

Parameters

pin: the pin number

value: HIGH (//www.arduino.cc/en/Reference/Constants) or LOW (//www.arduino.cc/en/Reference/Constants)

Returns

none

Example

```
int ledPin = 13;
                                 // LED connected to digital pin 13
void setup()
 pinMode(ledPin, OUTPUT);
                                // sets the digital pin as output
void loop()
 digitalWrite(ledPin, HIGH);
                                // sets the LED on
 delav(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 AO, 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)

Reference Home (//www.arduino.cc/en/Reference/HomePage)

Corrections, suggestions, and new documentation should be posted to the Forum (http://arduino.cc/forum/index.php/board,23.0.html).

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