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# digitalRead()

## Description

Reads the value from a specified digital pin, either 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)).

## Syntax

`digitalRead(pin)`

## Parameters

pin: the number of the digital pin you want to read (*int*)

## Returns

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))

## Example

Sets pin 13 to the same value as pin 7, declared as an input.

```
int ledPin = 13; // LED connected to digital pin 13
int inPin = 7;   // pushbutton connected to digital pin 7
int val = 0;     // variable to store the read value

void setup()
{
  pinMode(ledPin, OUTPUT); // sets the digital pin 13 as output
  pinMode(inPin, INPUT);   // sets the digital pin 7 as input
}

void loop()
{
  val = digitalRead(inPin); // read the input pin
  digitalWrite(ledPin, val); // sets the LED to the button's value
}
```

[Get Code] ([//www.arduino.cc/en/Reference/DigitalRead?action=sourceblock&num=1](https://www.arduino.cc/en/Reference/DigitalRead?action=sourceblock&num=1))

## Note

If the pin isn't connected to anything, `digitalRead()` can return either HIGH or LOW (and this can change randomly).  
(<https://www.arduino.cc>)

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

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See also

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

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*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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