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/*
Button

Turns on and off a light emitting diode(LED) connected to digital
pin 13, when pressing a pushbutton attached to pin 2.
```

The circuit:

- \* LED attached from pin 13 to ground
  - \* pushbutton attached to pin 2 from +5V
  - \* 10K resistor attached to pin 2 from ground
- \* Note: on most Arduinos there is already an LED on the board attached to pin 13.

created 2005

by DojoDave

modified 28 Oct 2010

by Tom Igoe

This example code is in the public domain.

<http://www.arduino.cc/en/Tutorial/Button>

\*/

```
// constants won't change. They're used here to
// set pin numbers:
const int buttonPin = 2; // the number of the pushbutton pin
```

```
const int ledPin = 13; // the number of the LED pin

// variables will change:
int buttonState = 0; // variable for reading the pushbutton status

void setup() {
    // initialize the LED pin as an output:
    pinMode(ledPin, OUTPUT);
    // initialize the pushbutton pin as an input:
    pinMode(buttonPin, INPUT);
}

void loop(){
    // read the state of the pushbutton value:
    buttonState = digitalRead(buttonPin);

    // check if the pushbutton is pressed.
    // if it is, the buttonState is HIGH:
    if (buttonState == HIGH) {
        // turn LED on:
        digitalWrite(ledPin, HIGH);
    }
    else {
        // turn LED off:
        digitalWrite(ledPin, LOW);
    }
}
```

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