

This example demonstrates the use of `pinMode(INPUT_PULLUP)`. It reads a digital input on pin 2 and prints the results to the serial monitor.

The circuit:

- * Momentary switch attached from pin 2 to ground
- * Built-in LED on pin 13

Unlike `pinMode(INPUT)`, there is no pull-down resistor necessary. An internal 20K-ohm resistor is pulled to 5V. This configuration causes the input to read HIGH when the switch is open, and LOW when it is closed.

```
1 void setup() {
2 //start serial connection
3 Serial.begin(9600);
4 //configure pin2 as an input and enable the internal
5 pull-up resistor
6 pinMode(2, INPUT_PULLUP);
7 pinMode(3, INPUT_PULLUP);
8 pinMode(13, OUTPUT);
9 }
10 void loop() {
11 //read the pushbutton value into a variable
12 int sensorVal1 = digitalRead(2);
13 int sensorVal2 = digitalRead(3);
14 //print out the value of the pushbutton
15 Serial.print(sensorVal1);Serial.print(" "); Serial.println(sensorVal2);
16 // Keep in mind the pullup means the pushbutton's
17 // logic is inverted. It goes HIGH when it's open,
18 // and LOW when it's pressed. Turn on pin 13 when the
19 // button's pressed, and off when it's not:
20 if ((sensorVal1 +sensorVal2)== 1) {
21 digitalWrite(13, 1);
22 } else {
23 digitalWrite(13, 0);
24 }
```