Arduino Button

Get Arduino to Read a Button and light an LED if it's pressed.

```
// Pullup sketch
// A switch connected to pin 2 lights the LED on pin 13

const int ledPin = 13;        // output pin for the LED
const int inputPin = 2;       // input pin for the switch

void setup() {
  pinMode(ledPin, OUTPUT);
  pinMode(inputPin, INPUT);
  digitalWrite(inputPin,HIGH);
}
```

Turn on internal pull-up on the inputPin

```
void loop(){
  int val = digitalRead(inputPin); // read input value
  if (val == LOW)        // check if the input is LOW
    digitalWrite(ledPin, HIGH);     // turn LED ON
  else
    digitalWrite(ledPin, LOW);      // turn LED OFF
}
```

QUESTION: Why does the inputPin need a Pullup?

- Add a second LED and button.

Pressing the button pulls pin 2 to 0V (LOW)

0V

Arduino UNO

CoderDojo