experiment 02: led push button code

```
const int buttonPin = 2; // the number of the pushbutton pin
                         // the number of the LED pin
const int ledPin = 12;
// variables will change:
int buttonState = 1; // 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, LOW);
  } else {
     // turn LED off:
     digitalWrite(ledPin, HIGH);
  }
}
```