```arduino
int ledPin = 13;           // choose the pin for the LED
int inputPin = 2;          // choose the input pin (for PIR sensor)
int pirState = LOW;        // we start, assuming no motion detected
int val = 0;               // variable for reading the pin status
void setup() {
  pinMode(ledPin, OUTPUT);     // declare LED as output
  pinMode(inputPin, INPUT);    // declare sensor as input
  Serial.begin(9600);
}
void loop(){
  val = digitalRead(inputPin);  // read input value
  if (val == HIGH) {          // check if the input is HIGH
    digitalWrite(ledPin, HIGH);  // turn LED ON
    if (pirState == LOW) {
      Serial.println("Motion detected!");
      pirState = HIGH;
    }
  } else {
    digitalWrite(ledPin, LOW); // turn LED OFF
    if (pirState == HIGH){
      // we have just turned of
      Serial.println("Motion ended!");
      // We only want to print on the output change, not state
      pirState = LOW;
    }
  }
}.
```