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//includes
#include <SPI.h> // needed in Arduino 0019 or later
#include <Ethernet.h>
#include <Twitter.h>
#include <time.h>

// Ethernet Shield Settings
byte mac[] = { 0xDE, 0xAD, 0xBE, 0xEF, 0xFE, 0xED };

// If you don't specify the IP address, DHCP is used(only in Arduino 1.0 or later).
byte ip[] = { 192, 168, 137, 34 };

// Your Token to Tweet (get it from http://arduino-tweet.appspot.com/)
Twitter twitter("INSERT TOKEN HERE");

int tweetcount = 0;

/*
 * PIR sensor tester
 */

int ledPin = 13;           // choose the pin for the LED
int inputPin = 12;         // 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---
//LED Pin Variables
int ledPins[] = {2,3,4,5,6,7,8,9};

void setup() {
  pinMode(ledPin, OUTPUT);    // declare LED as output
  pinMode(inputPin, INPUT);   // declare sensor as input

  //Set each pin connected to an LED to output mode (pulling high (on) or low (off)
  for(int i = 0; i < 8; i++){ //this is a loop and will repeat eight times
    pinMode(ledPins[i],OUTPUT); //we use this to set each LED pin to output

    Serial.begin(9600);
  }
}

void loop(){
  int trashcount = 0;

  val = digitalRead(inputPin); // read input value
  if (val == HIGH) {           // check if the input is HIGH
    oneAfterAnotherLoop();
    trashcount++;
    tweetcount++;

    Serial.println(tweetcount);
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    //if(tweetcount%2) {
        if(tweetcount) {
            TweetThis(tweetcount);
        }

    if (pirState == LOW) {
        // we have just turned on
        Serial.println("Motion detected!");
        // We only want to print on the output change, not state
        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;
    }
}
}

void TweetThis(int tweetcount) {
    delay(1000);

    // Message to post
    char msg[] = "One less piece of trash! # of items kept off our streets: ";
    char integer_string[32];

    sprintf(integer_string, "%d", tweetcount);

    strcat(msg, integer_string);

    Ethernet.begin(mac, ip);
    // or you can use DHCP for autoomatic IP address configuration.
    // Ethernet.begin(mac);
    Serial.begin(9600);

    Serial.println("connecting ...");
    if (twitter.post(msg)) {
        // Specify &Serial to output received response to Serial.
        // If no output is required, you can just omit the argument, e.g.
        // int status = twitter.wait();
        int status = twitter.wait(&Serial);
        if (status == 200) {
            Serial.println("OK.");
        } else {
            Serial.print("failed : code ");
            Serial.println(status);
        }
    } else {

```

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    Serial.println("connection failed.");
  }
}

void oneAfterAnotherLoop(){
  int delayTime = 100; //the time (in milliseconds) to pause between LEDs
                        //make smaller for quicker switching and larger for slower

  //Turn Each LED on one after another
  for(int i = 0; i <= 7; i++){
    digitalWrite(ledPins[i], HIGH); //Turns on LED #i each time this runs i
    delay(delayTime);                //gets one added to it so this will repeat
  }                                  //8 times the first time i will = 0 the final
                                    //time i will equal 7;

  //Turn Each LED off one after another
  for(int i = 7; i >= 0; i--){ //same as above but rather than starting at 0 and counting up
                                //we start at seven and count down
    digitalWrite(ledPins[i], LOW); //Turns off LED #i each time this runs i
    delay(delayTime);              //gets one subtracted from it so this will repeat
  }                                //8 times the first time i will = 7 the final
                                    //time it will equal 0

}
```