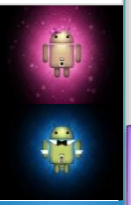
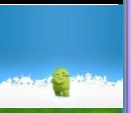
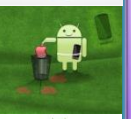
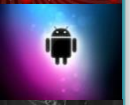
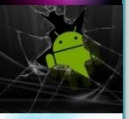
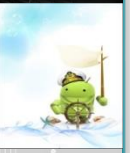


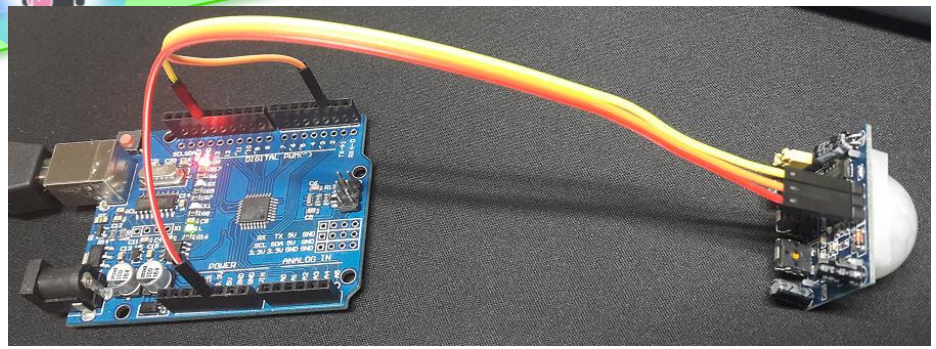


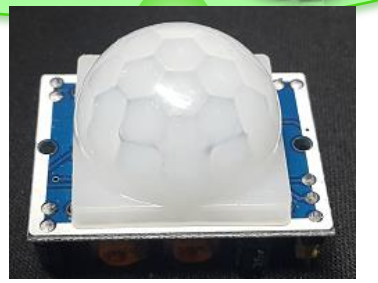





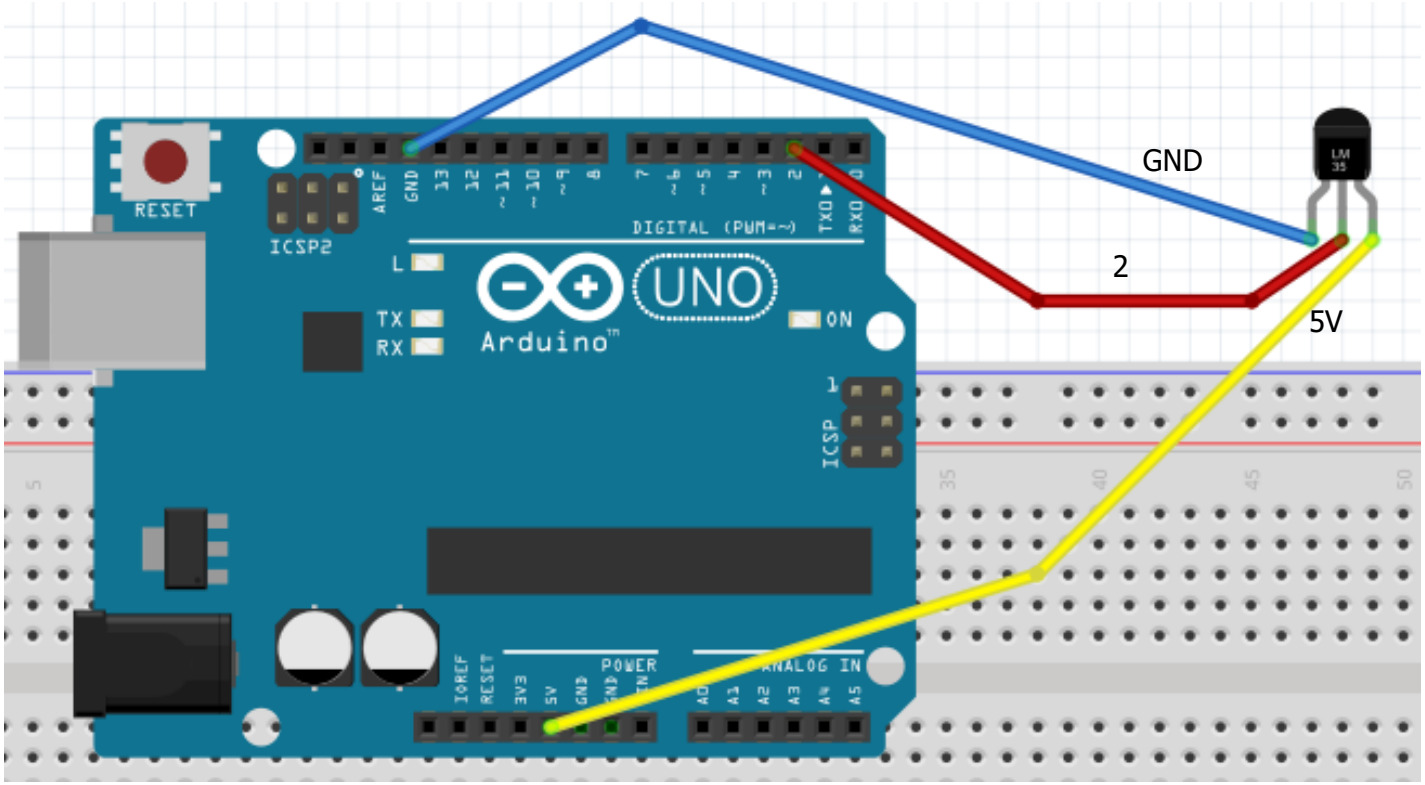





아두이노 둘

인체감지






GND
2
5V
RESET
ICSP2
AREF
GND
DIGITAL (PWM=~)
TX
RX
ON
Arduino
UNO
ICSP
POWER
ANALOG IN

Psensor | 아두이노 1.6.7

파일 편집 스케치 툴 도움말

Psensor§

```
1
2  int inputPin = 2; // 센서 시그널핀
3   int pirState = LOW; // PIR 초기상태
4   int val = 0; // Signal 입력값
5
6   void setup() {
7      pinMode(inputPin, INPUT); // 센서 Input 설정
8      Serial.begin(9600);
9   }
10
11  void loop(){
12    val = digitalRead(inputPin); // 센서값 읽기
13
14    if (val == HIGH) { // 인체감지시
15         if (pirState == LOW) { // 시리얼모니터에 메시지 출력
16         Serial.println("Motion detected!");
17         pirState = HIGH;
18         }
19    } else {
20         if (pirState == HIGH){      // 시리얼모니터에 메시지 출력
21             Serial.println("Motion ended!");
22             pirState = LOW;
23         }
24     }
25  }
26
```

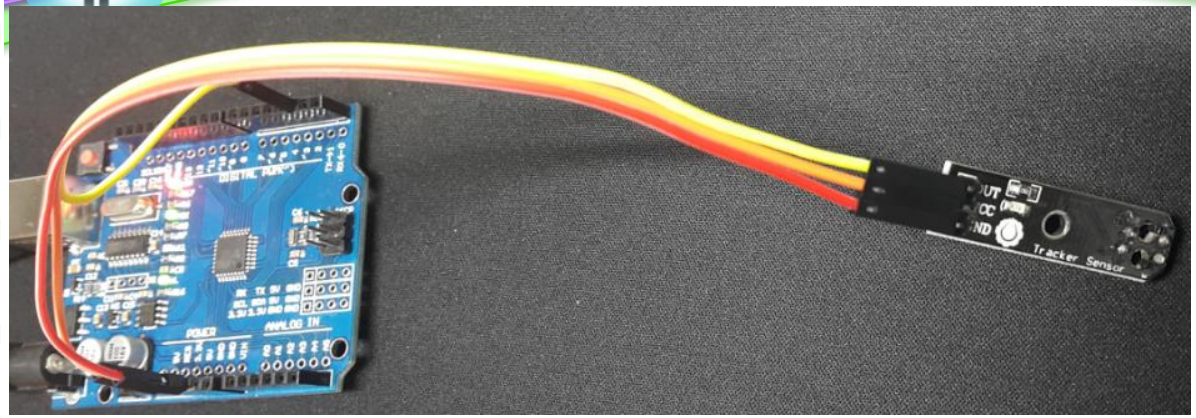
COM4

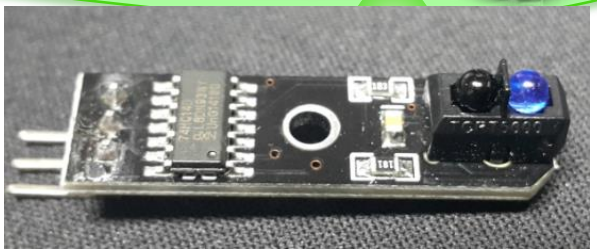
전송

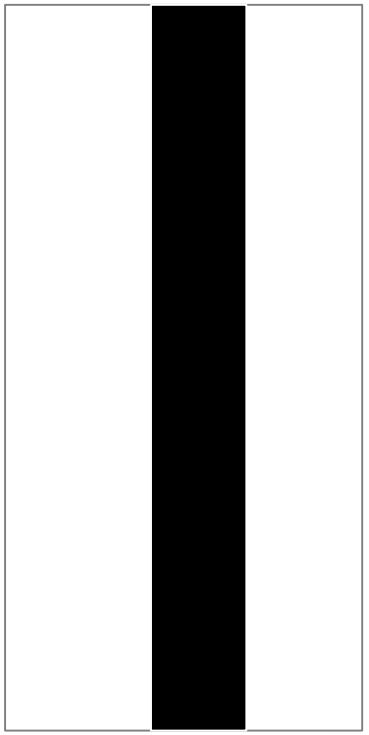
```
Motion detected!
Motion ended!
Motion detected!
Motion ended!
Motion detected!
Motion ended!
Motion detected!
Motion ended!
Motion detected!
Motion ended!
Motion detected!
Motion ended!
Motion detected!
```

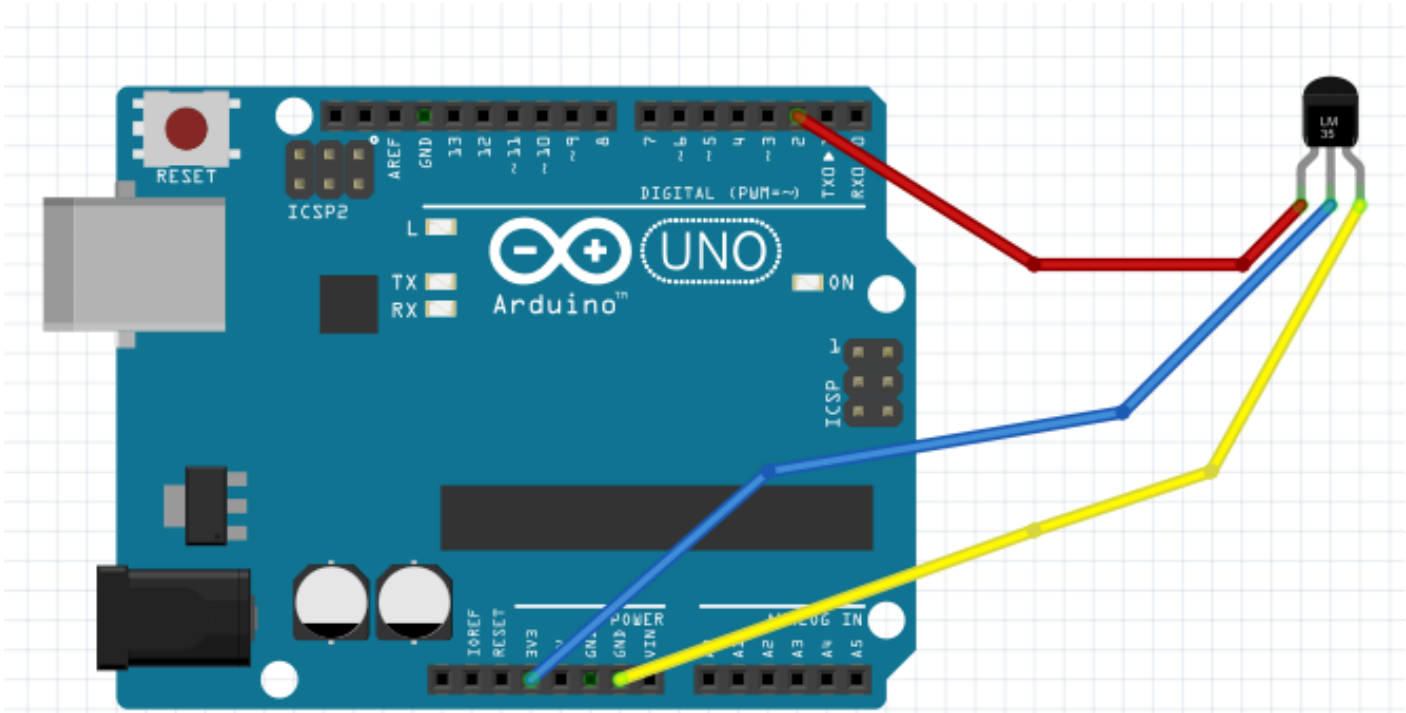
자동 스크롤 line ending 없음 9600 보드레이트

라인


OUT
VCC
GND
Tracker Sensor

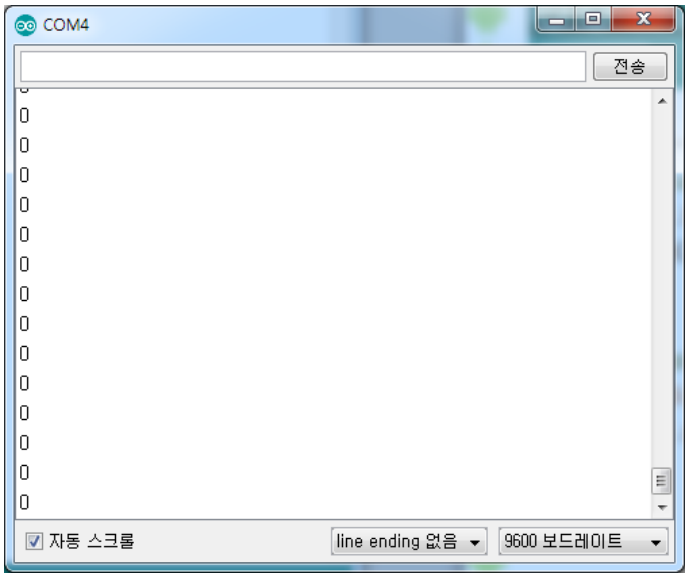




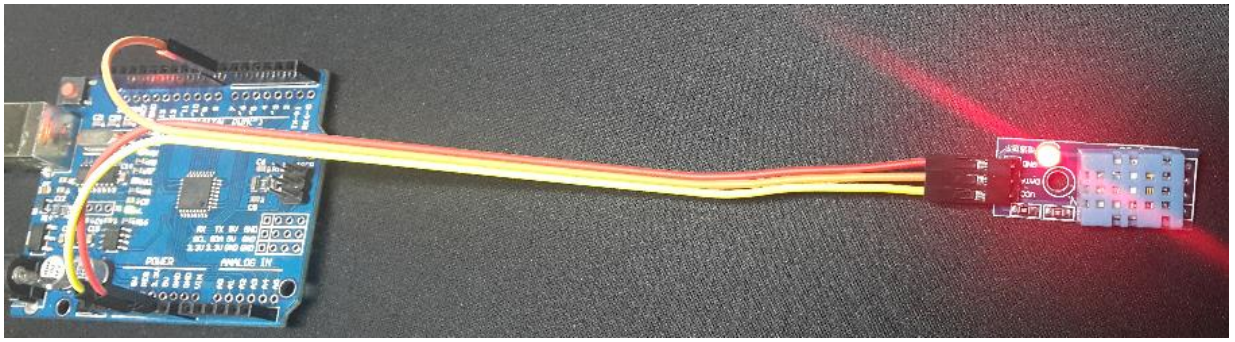

RESET
ICSP2
AREF
GND
13
12
~11
~10
~9
8
7
~6
~5
4
~3
2
TX→1
RX←0
DIGITAL (PWM=~)
L
TX
RX
ON
UNO
Arduino™
ICSP
POWER
ANALOG IN
IOREF
RESET
3V3
5V
GND
GND
VIN
A0
A1
A2
A3
A4
A5
LM
35

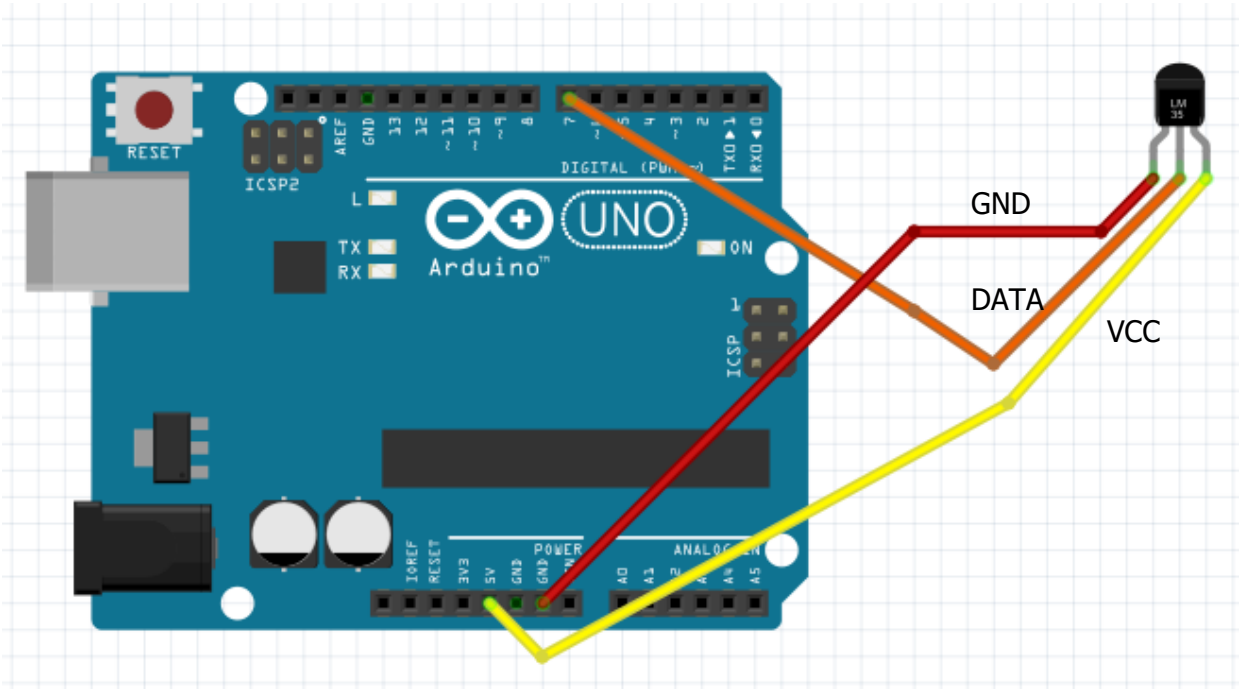
Psensor

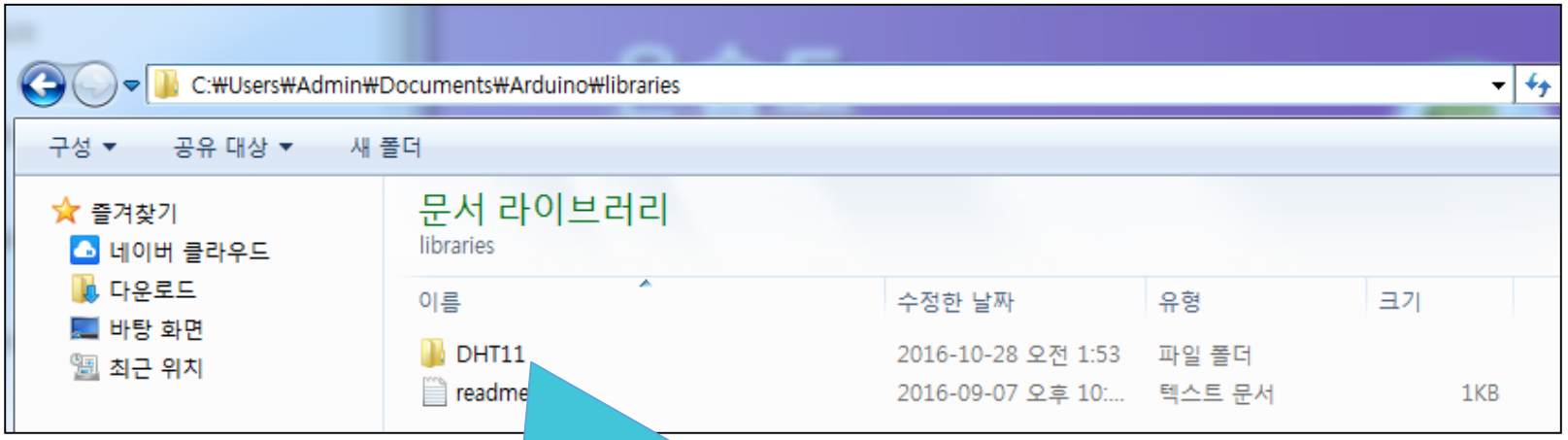
```
1
2  int val = 0;
3  void setup(){
4   Serial.begin(9600);
5   pinMode(2, INPUT);
6  }
7
8  void loop(){
9   val = digitalRead(2);
10  Serial.println(val);
11 }
12
```



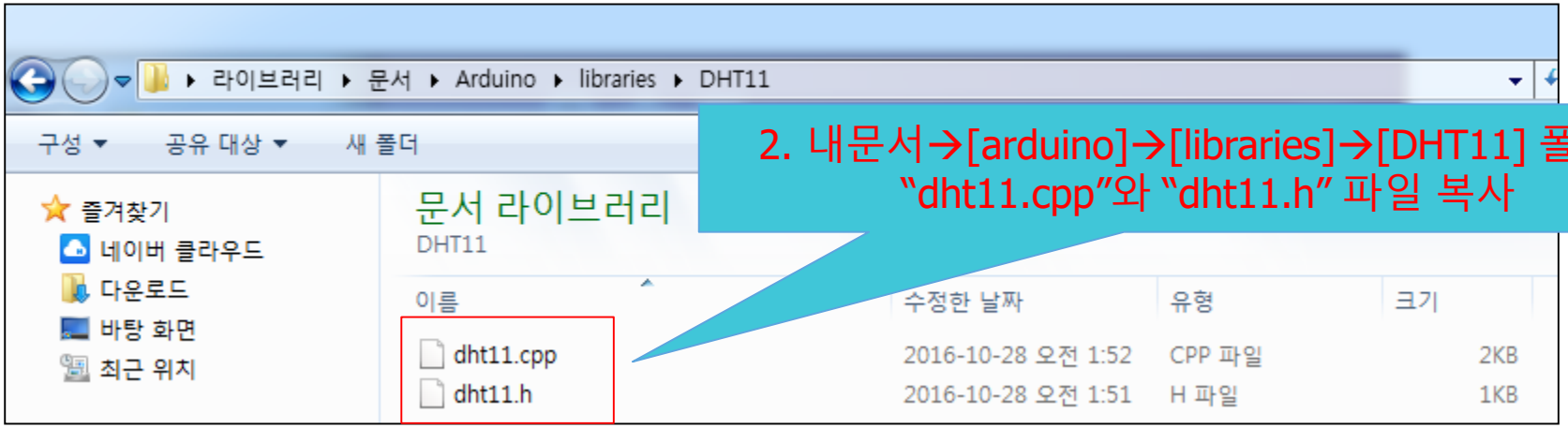
온습도







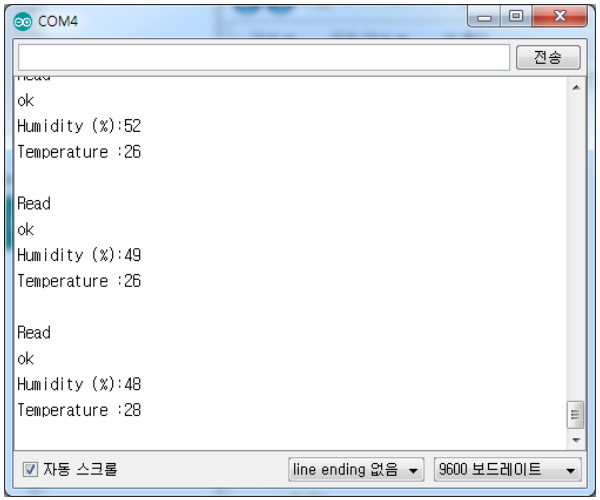
1. 내문서→[arduino]→[libraries]→[DHT11] 폴더 생성



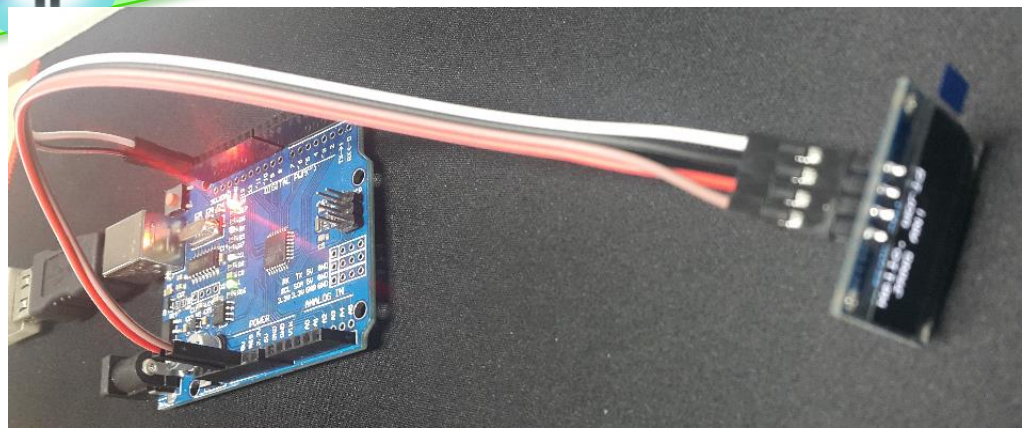
2. 내문서→[arduino]→[libraries]→[DHT11] 폴더에 "dht11.cpp"와 "dht11.h" 파일 복사

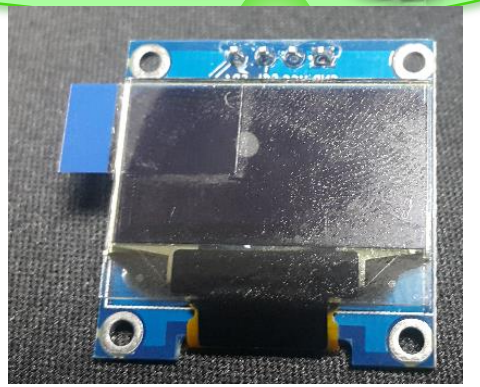
3. "arduino 스케치" 프로그램 다시 시작

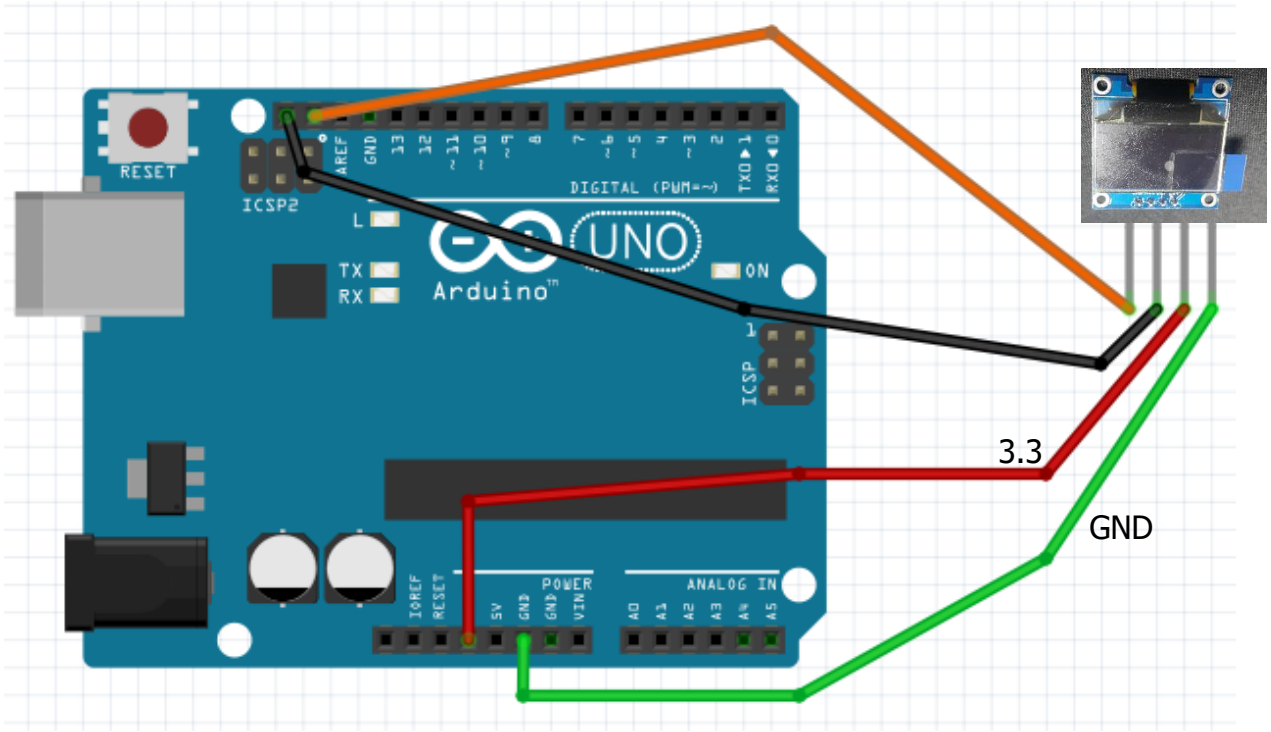
```ino
#include <dht11.h>
#define DHT11PIN 7 //7번핀을 통해 온도와 습도정보를 전달합니다.
dht11 DHT11;
void setup() {
  Serial.begin(9600);//시리얼통신 속도를 9600으로 맞춥니다.
  Serial.println("start");

}

void loop() {
 Serial.println();
 int chk=DHT11.read(DHT11PIN);//7번핀을 통해 정보를 읽습니다.
 Serial.println("Read");
 switch(chk){//상태를 체크합니다. ok가나와야 정상입니다.
  case 0:Serial.println("ok");break;
  case -1:Serial.println("checksum error"); break;
  case -2:Serial.println("time out"); break;
  default:Serial.println("unknown"); break;
 }
 Serial.print("Humidity (%):");
 Serial.println(DHT11.humidity);//습도 출력
 Serial.print("Temperature :");
 Serial.println(DHT11.temperature);//온도 출력
 delay(2000);//2초지연
}
```

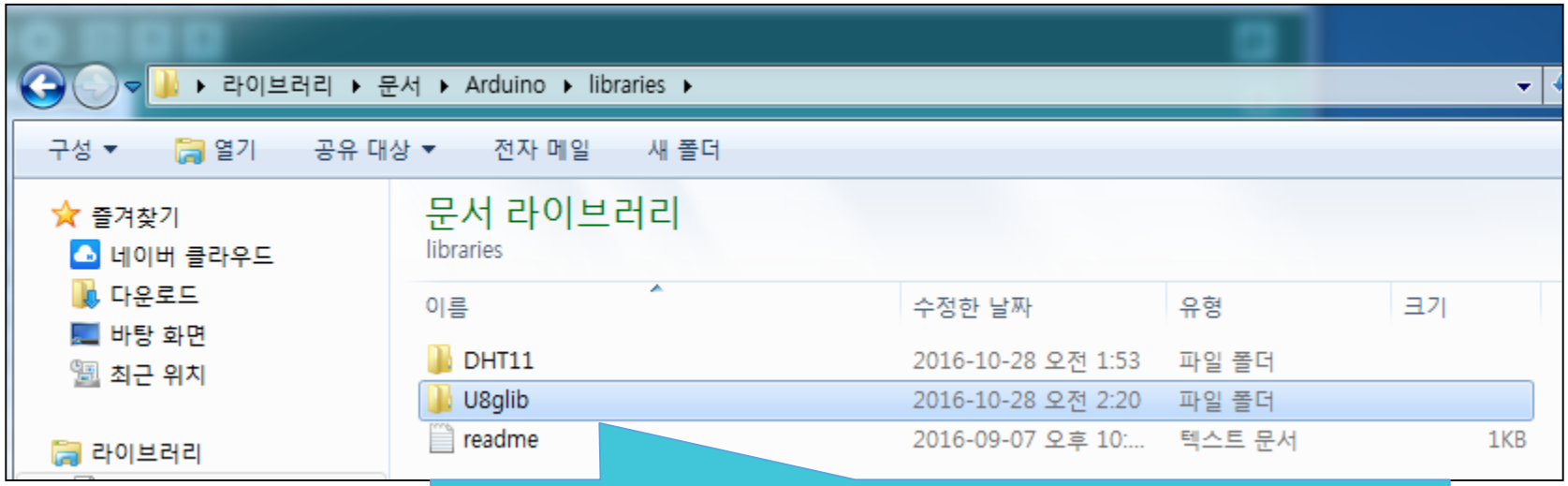


0.96 OLED





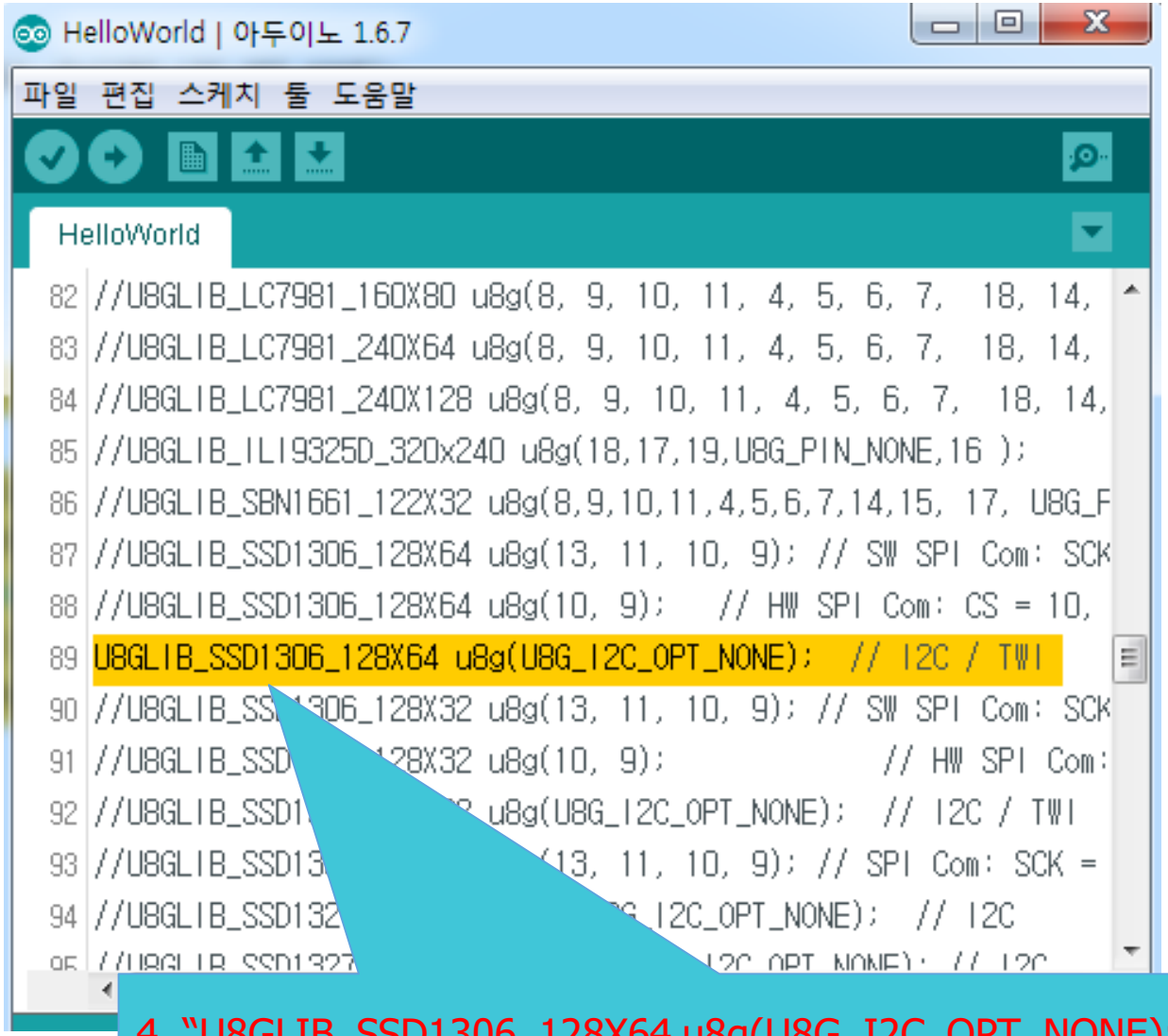

RESET
ICSP2
AREF
GND
DIGITAL (PWM=~)
TX
RX
ON
Arduino
UNO
ICSP
POWER
ANALOG IN
3.3
GND



1. 내문서→[arduino]→[libraries]→[U8glib] 폴더 복사

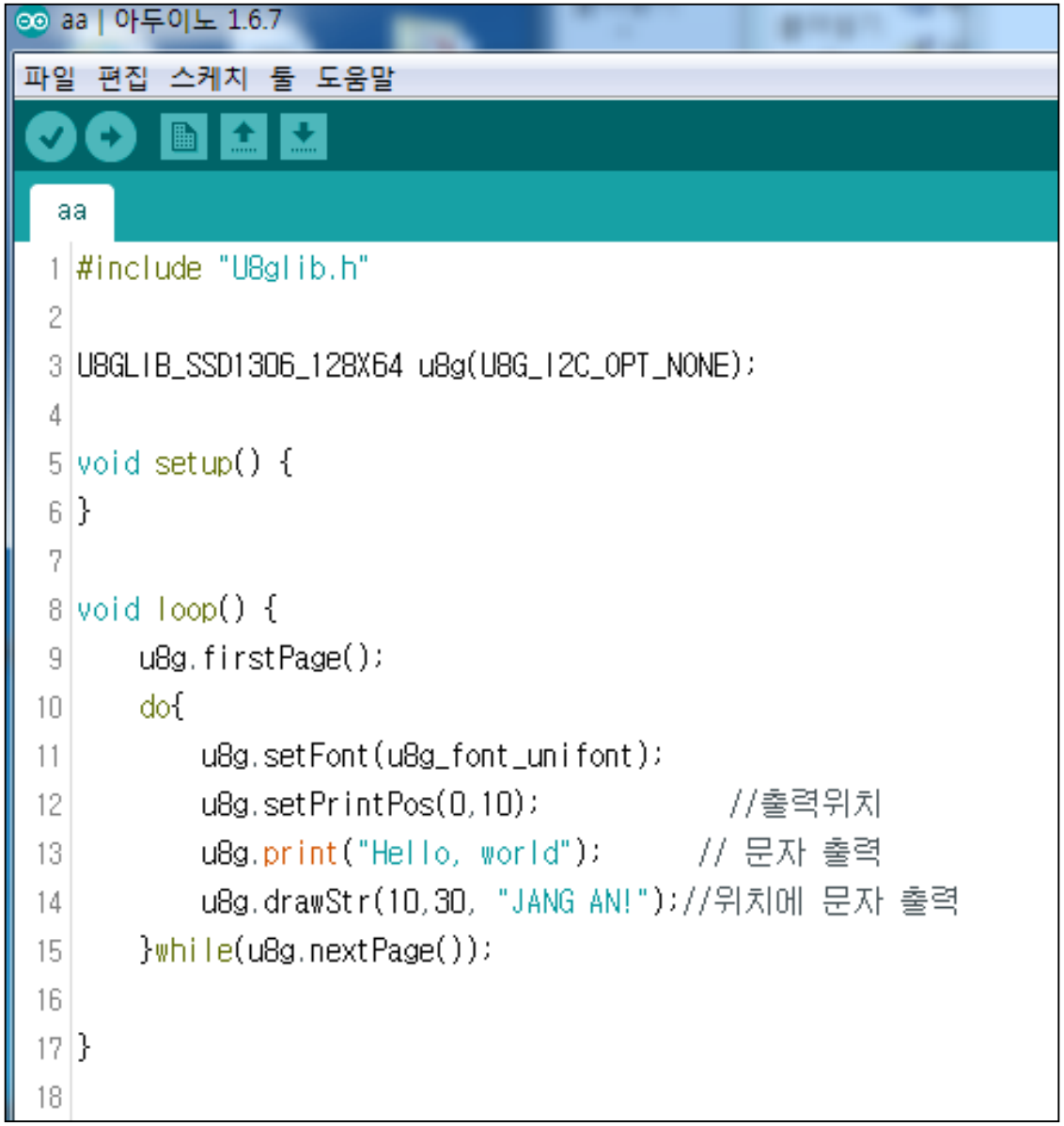
2. "arduino 스케치" 프로그램 다시 시작

3. "HelloWorld" 클릭



4. "U8GLIB_SSD1306_128X64 u8g(U8G_I2C_OPT_NONE); // I2C / TWI "주석 해제 후 저장

(읽기 전용으로서 프로젝트 저장 폴더에 저장)


aa | 아두이노 1.6.7
파일 편집 스케치 툴 도움말
aa
#include "U8glib.h"
U8GLIB_SSD1306_128X64 u8g(U8G_I2C_OPT_NONE);
void setup() {
}
void loop() {
u8g.firstPage();
do{
u8g.setFont(u8g_font_unifont);
u8g.setPrintPos(0,10); //출력위치
u8g.print("Hello, world"); // 문자 출력
u8g.drawStr(10,30, "JANG AN!");//위치에 문자 출력
}while(u8g.nextPage());
}