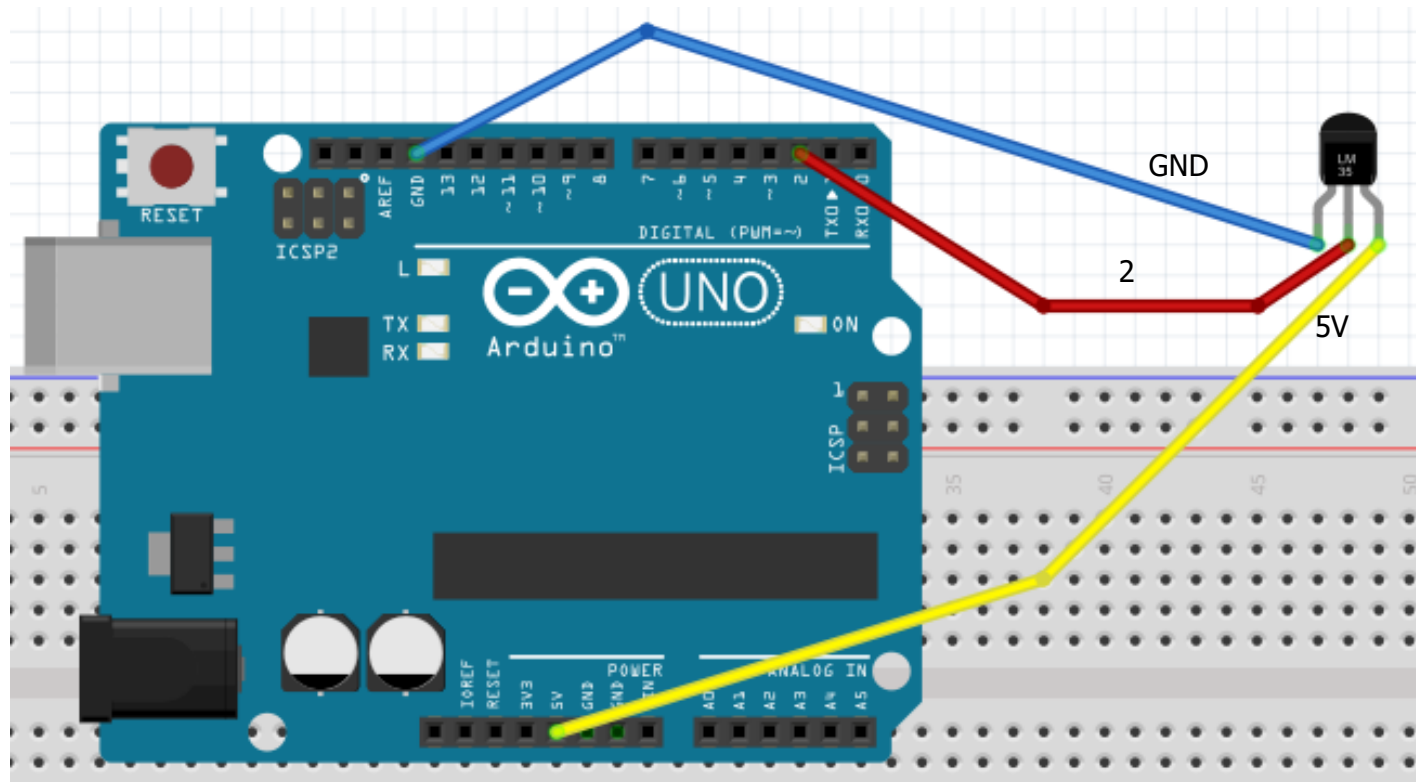
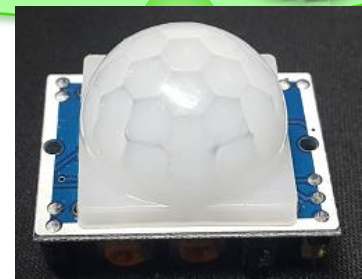
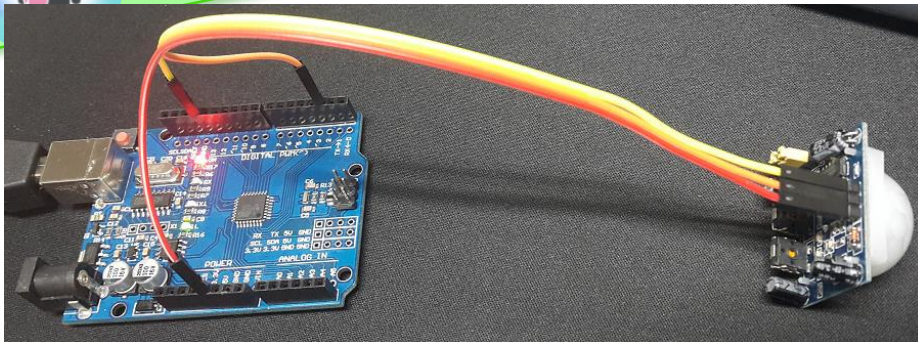


아두이노 둘



인체감지



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
```

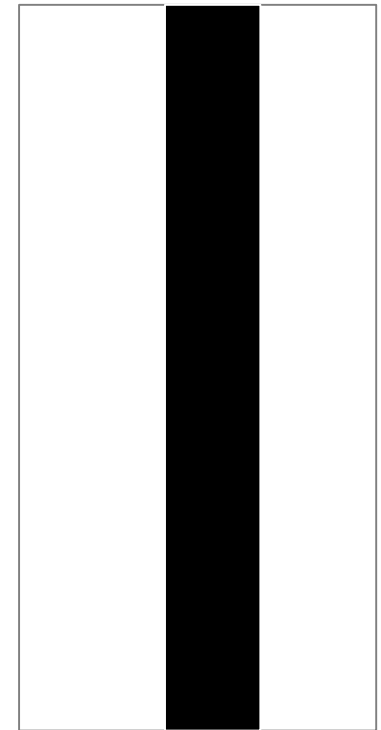
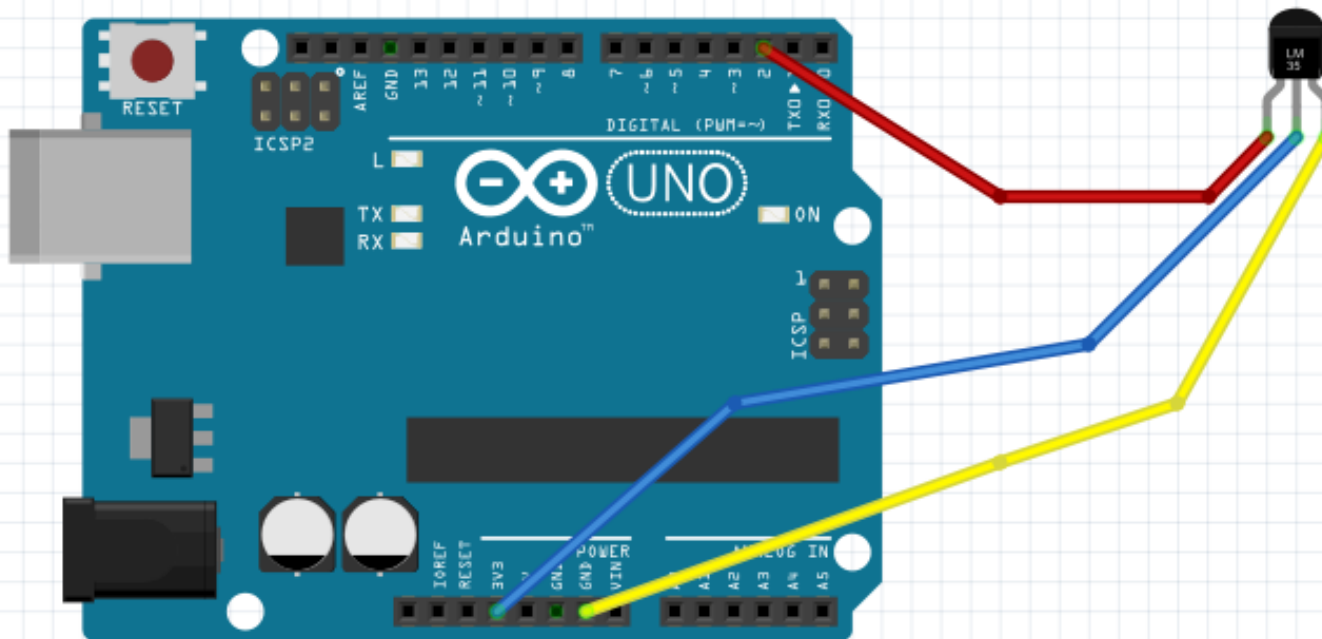
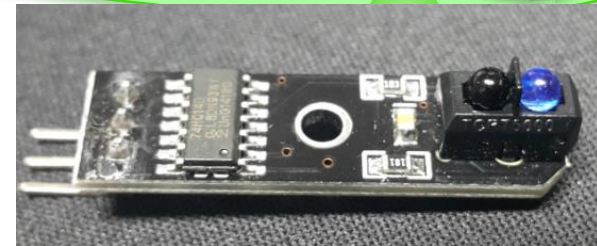
COM4

전송

```
Motion ended!
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!
```

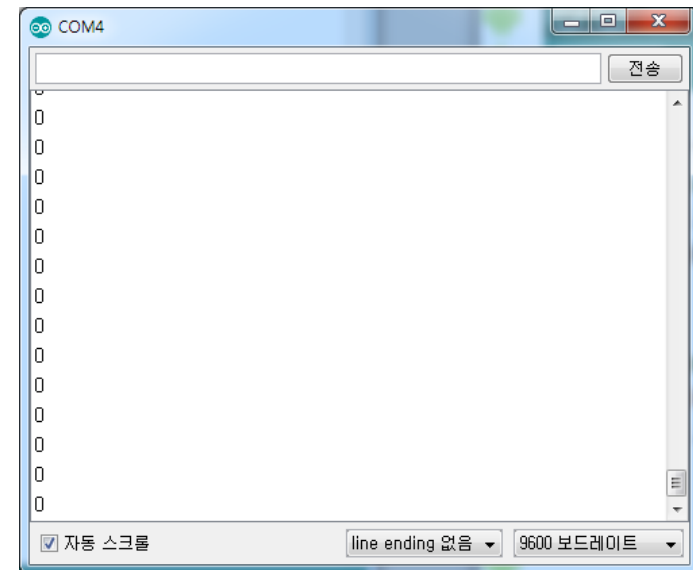
☒ 자동 스크롤 line ending 없음 9600 보드레이트

라인

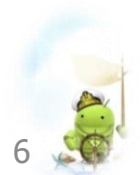
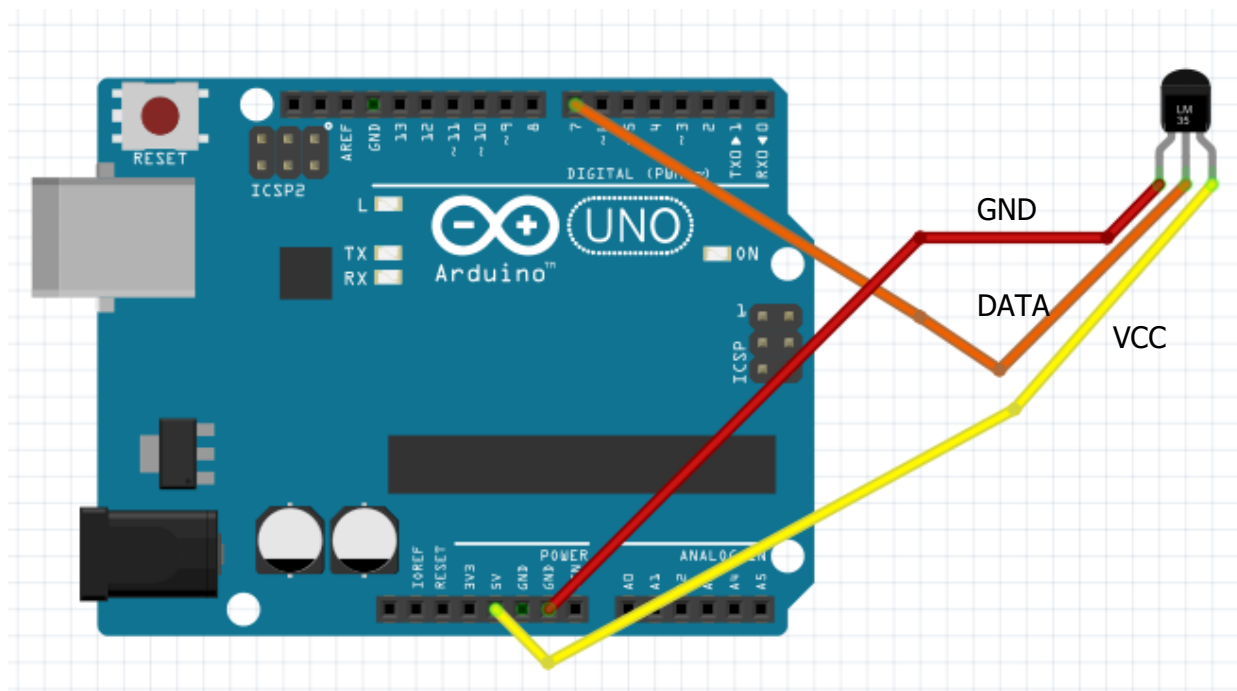


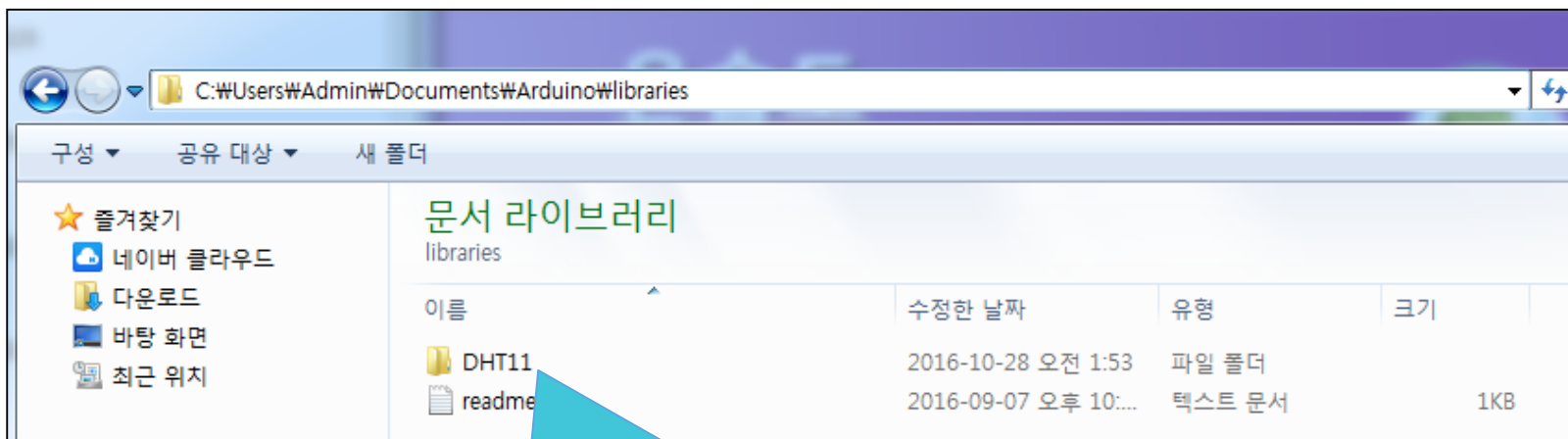


```
1  
2 int val = 0;  
3 void setup(){  
4   Serial.begin(9600);  
5   pinMode(2, INPUT);  
6 }  
7  
8 void loop(){  
9   val = digitalRead(2);  
10  Serial.println(val);  
11 }  
12
```

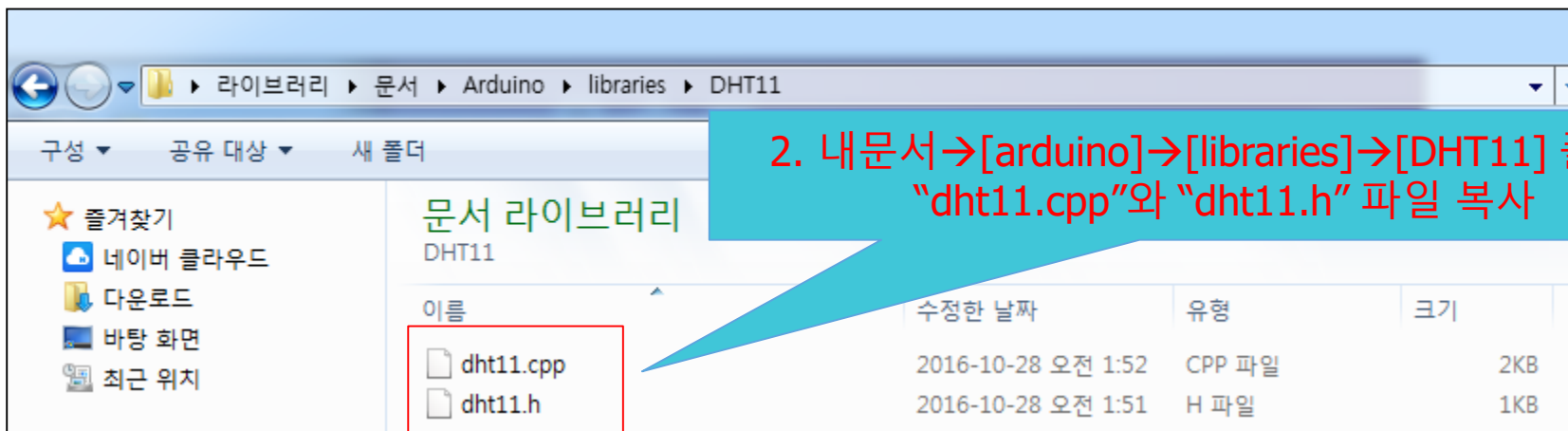


온습도





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



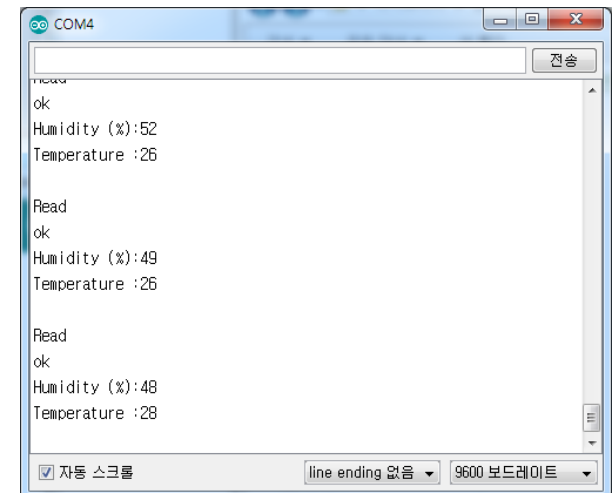
2. 내문서→[arduino]→[libraries]→[DHT11] 폴더에
"dht11.cpp"와 "dht11.h" 파일 복사

3. "arduino 스케치" 프로그램 다시 시작

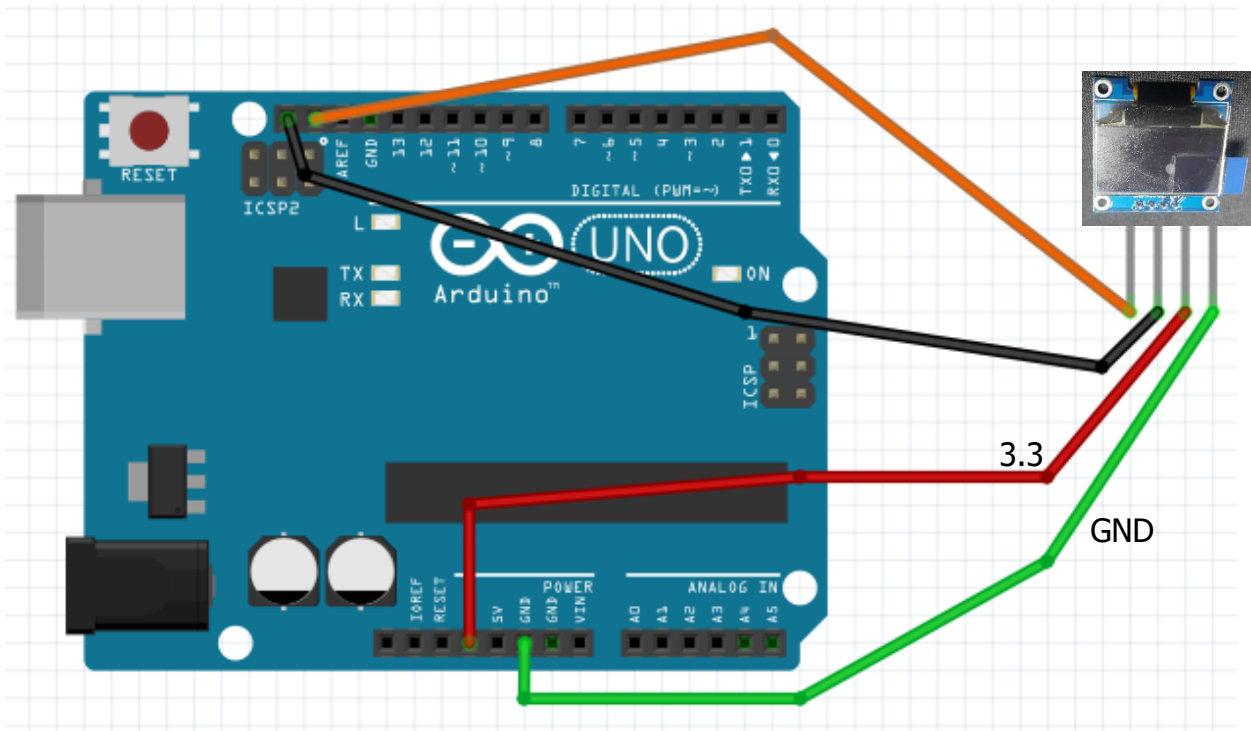
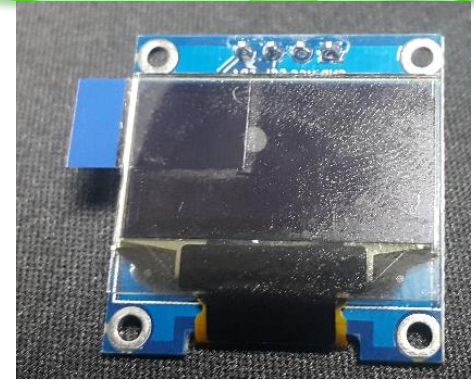
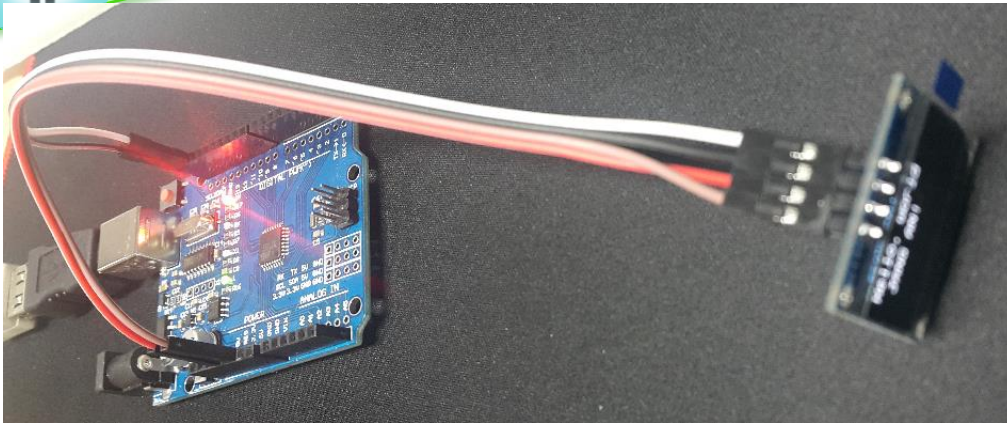
```

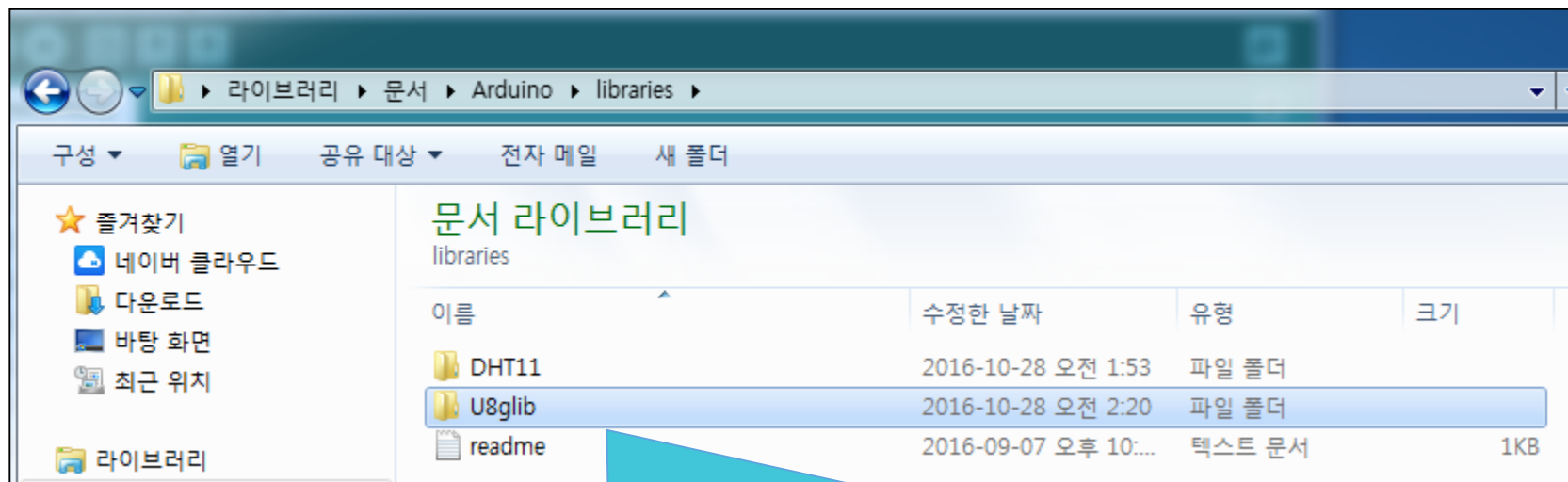
1 #include <dht11.h>
2 #define DHT11PIN 7 //7번핀을 통해 온도와 습도정보를 전달합니다.
3 dht11 DHT11;
4 void setup() {
5     Serial.begin(9600); //시리얼통신 속도를 9600으로 맞춥니다.
6     Serial.println("start");
7
8 }
9
10 void loop() {
11     Serial.println();
12     int chk=DHT11.read(DHT11PIN); //7번핀을 통해 정보를 읽습니다.
13     Serial.println("Read");
14     switch(chk){ //상태를 체크합니다. ok가나와야 정상입니다.
15         case 0: Serial.println("ok"); break;
16         case -1: Serial.println("checksum error"); break;
17         case -2: Serial.println("time out"); break;
18         default: Serial.println("unknown"); break;
19     }
20     Serial.print("Humidity (%):");
21     Serial.println(DHT11.humidity); //습도 출력
22     Serial.print("Temperature :");
23     Serial.println(DHT11.temperature); //온도 출력
24     delay(2000); //2초지연
25 }

```



0.96 OLED





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

2. "arduino 스케치" 프로그램 다시 시작



3. "HelloWorld" 클릭



HelloWorld | 아두이노 1.6.7

파일 편집 스케치 툴 도움말

HelloWorld

```
82 //U8GLIB_LC7981_160X80 u8g(8, 9, 10, 11, 4, 5, 6, 7, 18, 14,
83 //U8GLIB_LC7981_240X64 u8g(8, 9, 10, 11, 4, 5, 6, 7, 18, 14,
84 //U8GLIB_LC7981_240X128 u8g(8, 9, 10, 11, 4, 5, 6, 7, 18, 14,
85 //U8GLIB_ILI9325D_320x240 u8g(18,17,19,U8G_PIN_NONE,16 );
86 //U8GLIB_SBN1661_122X32 u8g(8,9,10,11,4,5,6,7,14,15, 17, U8G_F
87 //U8GLIB_SSD1306_128X64 u8g(13, 11, 10, 9); // SW SPI Com: SCK
88 //U8GLIB_SSD1306_128X64 u8g(10, 9); // HW SPI Com: CS = 10,
89 U8GLIB_SSD1306_128X64 u8g(U8G_I2C_OPT_NONE); // I2C / TWI
90 //U8GLIB_SSD1306_128X32 u8g(13, 11, 10, 9); // SW SPI Com: SCK
91 //U8GLIB_SSD1306_128X32 u8g(10, 9); // HW SPI Com:
92 //U8GLIB_SSD1306_128X32 u8g(U8G_I2C_OPT_NONE); // I2C / TWI
93 //U8GLIB_SSD1306_128X32 u8g(13, 11, 10, 9); // SPI Com: SCK =
94 //U8GLIB_SSD1306_128X32 u8g(U8G_I2C_OPT_NONE); // I2C
95 //U8GLIB_SSD1306_128X32 u8g(U8G_I2C_OPT_NONE); // I2C
```

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
[Icons: Checkmark, Arrow, Grid, Up Arrow, Down Arrow]
aa
1 #include "U8glib.h"
2
3 U8GLIB_SSD1306_128X64 u8g(U8G_I2C_OPT_NONE);
4
5 void setup() {
6 }
7
8 void loop() {
9     u8g.firstPage();
10    do{
11        u8g.setFont(u8g_font_unifont);
12        u8g.setPrintPos(0,10);           //출력위치
13        u8g.print("Hello, world");      // 문자 출력
14        u8g.drawStr(10,30, "JANG AN!"); //위치에 문자 출력
15    }while(u8g.nextPage());
16
17 }
18
```