

```
11  
12  
13 | | | | | | | | | | | | | | | | Blynk IoT platform  
14  
15 Blynk Credentials : (to access the dashboard) I  
16  
17 | | | | | Mail Id : karthidon521@gmail.com  
18 | | | | | Password: *****  
19  
20 ======  
21 */  
22 #define BLYNK_TEMPLATE_ID "TMPLgCeV0y1b"  
23 #define BLYNK_DEVICE_NAME "Home"  
24 #define BLYNK_AUTH_TOKEN "93h-1b23ewIQooDTdB2y2COGacfYkbD0"  
25  
26 #include <LiquidCrystal_I2C.h>  
27 LiquidCrystal_I2C lcd(0x27, 20, 4);  
28  
29 #define BLYNK_PRINT Serial
```

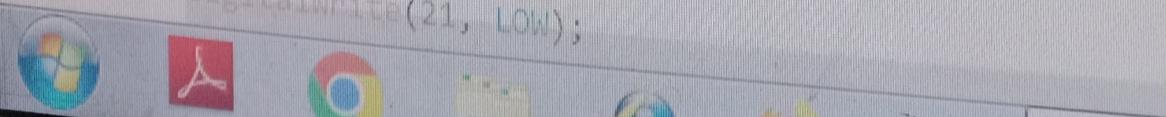


```
41
42     char ssid[] = "Wokwi-GUEST";
43     char pass[] = "";
44     int val = 0, va1,va2,va3,va4,va5,ge, t =15 ;           I
45     float tmp,hum = 0;
46
47     int ledPin = 33;
48     int inputPin = 27;
49     int pirState,k;
50     int v = 0;
51
52
53 //temp symbol
54 byte t1[8]={B00000, B00001, B00010, B00100, B00100, B00100, B00100, B00111,};
55 byte t2[8]={B00111, B00111, B00111, B01111,B11111, B11111, B01111, B00011,};
56 byte t3[8]={B00000, B10000, B01011, B00100, B00111, B00100, B00111, B11100,};
57 byte t4[8]={B11111, B11100, B11100, B11110,B11111, B11111, B11110, B11000,};
```

```
00 byte house1[8]={B00000, B00001, B00011, B00011, B00111, B01111, B01111, B11111
67 byte house2[8]={B11111, B11111, B11100, B11100, B11100, B11100, B11100, B11100
68 byte house3[8]={B00000, B10010, B11010, B11010, B11110, B11110, B11110, B11111
69 byte house4[8]={B11111, B11111, B11111, B10001, B10001, B10001, B11111, B11111
70
71 byte d[8] = { 0b00011,0b00011,0b00000,0b00000,0b00000,0b00000,0b00000,0b00000
72
73 byte Lck[] = { B01110, B10001, B10001, B11111, B11011, B11011, B11111, B00000
74
75
76
77 DHTesp temps;
78
79 BLYNK_WRITE(V0){
80     va1 = param.asInt();
81     digitalWrite(5, va1);
82
83 }
84 BLYNK_WRITE(V1){
85     va2 = param.asInt();
86     digitalWrite(18, va2);
87 }
```

```
105     if(pirState == 0){
106         digitalWrite(ledPin, LOW);
107         k = 1;
108         ge = 0;
109     }
110     else {
111         digitalWrite(ledPin, HIGH);
112         k= 0;
113         ge = 1;
114     }
115 }
116
117 void myTimer()
```

```
129
130 pinMode(5, OUTPUT);
131 pinMode(18, OUTPUT);
132 pinMode(19, OUTPUT);
133 pinMode(4, OUTPUT);
134 pinMode(23, INPUT);
135 pinMode(2, OUTPUT);
136 temps.setup(t, DHTesp::DHT22);
137 pinMode(ledPin, OUTPUT);
138 pinMode(inputPin, INPUT_PULLUP);
139
140 lcd.init();
141 lcd.backlight();
142
143 digitalWrite(5, LOW);
144 digitalWrite(18, LOW);
145 digitalWrite(19, LOW);
146 digitalWrite(21, LOW);
```



```
163 lcd.createChar(4,house4);  
164 lcd.setCursor(1,2);  
165 lcd.write(1);  
166 lcd.setCursor(1,3);  
167 lcd.write(2);  
168 lcd.setCursor(2,2);  
169 lcd.write(3);  
170 lcd.setCursor(2,3);  
171 lcd.write(4);  
172  
173 lcd.setCursor(17,2);  
174 lcd.write(1);  
175 lcd.setCursor(17,3);  
176 lcd.write(2);  
177 lcd.setCursor(18,2);  
178 lcd.write(3);
```

```
193     Blynk.virtualWrite(V7, pirState);
194     timer.setInterval(1000L, myTimer);           I
195   }
196
197
198
199 void loop()
200 {
201     Blynk.run();
202     timer.run();
203     val = digitalRead(23);
204     if(val == 1)
205     {
206         digitalWrite(2,va5);
207     }
208
209 else{
```

```
224     else if (k == 0)    {
225         digitalWrite(ledPin, HIGH);
226         k = 1;
227         ge = 1;
228     }
229 }
230
231
232 if (val == 1){
233     lcd.clear();
234     lcd.setCursor(19,0);
235     lcd.write(6);
236     lcd.setCursor(0, 1);
237     lcd.print("SW_1= ");
238     lcd.print("ON ");
```

```
250
251     lcd.setCursor(11, 1);
252     lcd.print("SW_2= ");
253     lcd.print("ON ");
254 }
255 else{
256     lcd.setCursor(11, 1);
257     lcd.print("SW_2= ");
258     lcd.print("OFF");
259 }
260 if (va3 == 1){
261
262     lcd.setCursor(0, 2);
263     lcd.print("SW_3= ");
264     lcd.print("ON ");
265 }
266 else{
267 }
```

```
281     lcd.print("SW_4= ");
282     lcd.print("OFF");
283 }
284     if (va5 == 1){
285
286     lcd.setCursor(0, 3);
287     lcd.print("OD_L= ");
288     lcd.print("ON ");
289 }
290 else{
291
292     lcd.setCursor(0, 3);
293     lcd.print("OD_L= ");
294     lcd.print("OFF");
295 }
296     if (ge == 1){
```

```
309     lcd.clear();
310     lcd.createChar(1,t1);
311     lcd.createChar(2,t2);
312     lcd.createChar(3,t3);
313     lcd.createChar(4,t4);
314     lcd.createChar(5, d);
315     lcd.createChar(6, Lck);
316
317
318     lcd.setCursor(19,0);
319     lcd.write(6);
320     lcd.setCursor(1,1);
321     lcd.write(1);
322     lcd.setCursor(1,2);
323     lcd.write(2);
324     lcd.setCursor(2,1);
325     lcd.write(3);
```

I

```
336  
337     delay(750);  
338     lcd.clear();  
339  
340     lcd.createChar(1,hum1);  
341     lcd.createChar(2,hum2);  
342     lcd.createChar(3,hum3);  
343     lcd.createChar(4,hum4);  
344  
345     lcd.setCursor(19,0);  
346     lcd.write(6);  
347     lcd.setCursor(3,1);  
348     lcd.write(1);  
349     lcd.setCursor(3,2);  
350     lcd.write(2);  
351     lcd.setCursor(4,1);  
352     lcd.write(3);  
353     lcd.setCursor(4,2);  
354     lcd.write(4);
```





Simulation

Code

