

## Codes Program

Kipas Angin Otomatis Berbasis Mikrokontroler dengan Sensor Suhu DHT11 dan LCD+I2C

```
#include <LiquidCrystal_I2C.h>
#include <DHT.h>

LiquidCrystal_I2C lcd (0x27, 16, 2);
DHT dht (2, DHT11);

#define kipas 5

void setup()
{
    Serial.begin (9600);
    pinMode (kipas, OUTPUT);

    dht.begin();

    lcd.backlight();
    lcd.begin (16, 2);

    lcd.setCursor (1, 0);
    lcd.print ("KIPAS OTOMATIS");
}

void loop()
{
    delay (2000);

    float suhu = dht.readTemperature();
    float kelembaban = dht.readHumidity();

    if (isnan (suhu) || isnan (kelembaban)){
        Serial.print (F ("gagal membaca data dht sensor"));

        return;
    }

    lcd.clear();
    lcd.setCursor (0, 0);
    lcd.print (("Suhu : "));
    lcd.print (suhu, 1);
    lcd.print (" C");

    lcd.setCursor(0, 1);
    lcd.print("Lembab : ");
    lcd.print(kelembaban, 1); // Print one decimal place
```

```
lcd.print(" %");  
delay (1000);  
  
Serial.print ("Suhu : ");  
Serial.print (suhu);  
Serial.print (" C");  
delay (1000);  
  
if (suhu > 25.00){  
    lcd.clear();  
    digitalWrite (kipas, LOW);  
    lcd.print ("KIPAS : ON");  
}  
else {  
    lcd.clear();  
    digitalWrite (kipas, HIGH);  
    lcd.print ("KIPAS : OFF");  
}  
}
```