LAMPIRAN

Listing Program

```
#include <AccelStepper.h>

#include <DHT.h>

#include <Wire.h>

#include <LiquidCrystal_I2C.h>

#include <EEPROM.h>


// Pin untuk motor stepper

#define motorPin1 2

#define motorPin2 3

#define motorPin3 8

#define motorPin4 9


// Pin sensor lainnya

int air = A0;

int cahaya = A2;

#define DHTPIN A1 // Pin data DHT22

#define DHTTYPE DHT22 // Tipe sensor DHT


// Interface tipe motor stepper (4-pin)

#define MotorInterfaceType 4


// Inisialisasi objek
```

```
AccelStepper stepper = AccelStepper(MotorInterfaceType, motorPin1,
      motorPin3, motorPin2, motorPin4);
DHT dht(DHTPIN, DHTTYPE);
LiquidCrystal_I2C lcd(0x27, 16, 2); // Alamat I2C LCD bisa berbeda (0x27 atau
      0x3F)

long posisi_terakhir;

void simpanPosisi(long posisi) {
   EEPROM.put(0, posisi);
}

void setup() {
   stepper.setMaxSpeed(500);
   stepper.setAcceleration(500);
   Serial.begin(9600);
   Serial.println("Jemuran Otomatis Siap");
   pinMode(air, INPUT);
   pinMode(cahaya, INPUT);
   dht.begin();
   lcd.init();
   lcd.backlight();
   lcd.setCursor(0, 0);
   lcd.print("Suhu:    Hum:  %");
```

```
    EEPROM.get(0, posisi_terakhir);
    stepper.setCurrentPosition(posisi_terakhir);
    Serial.print("Posisi terakhir motor: ");
    Serial.println(posisi_terakhir);
}

void loop() {
    int data_air = analogRead(air);
    int data_cahaya = analogRead(cahaya);
    int suhu = dht.readTemperature();
    int kelembaban = dht.readHumidity();

    if (isnan(suhu) || isnan(kelembaban)) {
        Serial.println("Gagal membaca sensor DHT22");
        return;
    }

    lcd.setCursor(5, 0);
    lcd.print("  ");
    lcd.setCursor(5, 0);
    lcd.print(suhu);
    lcd.print((char)223);
    lcd.setCursor(13, 0);
```

```
lcd.print("  ");
lcd.setCursor(13, 0);
lcd.print(kelembaban);

Serial.print("Data Air: ");
Serial.println(data_air);
Serial.print("Data Cahaya: ");
Serial.println(data_cahaya);
Serial.print("Suhu: ");
Serial.println(suhu);
Serial.print("Kelembaban: ");
Serial.println(kelembaban);

if (data_cahaya < 830 && data_air > 700) {
   if (stepper.currentPosition() != 6550) {
      Serial.println("Kondisi: Cerah - Jemuran Keluar");
      lcd.setCursor(0, 1);
      lcd.print("Jemuran Keluar  ");
      stepper.moveTo(6550);
      stepper.runToPosition();
      simpanPosisi(6550);
   }
} else {
   if (stepper.currentPosition() != 0) {
```

```
            Serial.println("Kondisi: Hujan atau Malam - Jemuran Didalam");
            lcd.setCursor(0, 1);
            lcd.print("Jemuran Didalam    ");
            stepper.moveTo(0);
            stepper.runToPosition();
            simpanPosisi(0);
        }
    }

    delay(2000);
}
```