

LAMPIRAN

1. Arduino IDE

```
#include <ESP8266WiFi.h>

//Konfigurasi WiFi
const char *ssid = "@wifi.id";
const char *password = "bukapassword";

//IP Address Server yang terpasang XAMPP
const char *host = "192.168.0.112";

void setup() {
  Serial.begin(115200);

  WiFi.mode(WIFI_STA);
  WiFi.begin(ssid, password);
  Serial.println("");

  Serial.print("Connecting");
  while (WiFi.status() != WL_CONNECTED) {
    delay(500);
    Serial.print(".");
  }

  //Jika koneksi berhasil, maka akan muncul address di serial monitor
  Serial.println("");
  Serial.print("Connected to ");
  Serial.println(ssid);
  Serial.print("IP address: ");
  Serial.println(WiFi.localIP());
```

```

}

int value = 0;

void loop() {
  humidityData = sht.readHumidity();
  temperatureData = sht.readTemperature();
  Sending_TO_phpmyadmindatabase ();
  if (temperature>30){
    DigitalWrite (Relay1, LOW);
  }else if (temperatureData<29){
    digitalWrite(Relay1, HIGH);
  }

  if (temperatureData <69){
    digitalWrite(Relay2, LOW);
  }else if (temperatureData>70){
    digitalWrite(Relay2, HIGH);
  }
  delay (30000); // interval
}

void Sending_To_phpmyadmindatabase()
// CONNECTING WITH MYSQL

++value;

int datasensor=analogRead(A0);
Serial.println(datasensor);

Serial.print("connecting to ");
Serial.println(host);

```

```

WiFiClient client;
const int httpPort = 80;
if (!client.connect(host, httpPort)) {
    Serial.println("connection failed");
    return;
}

String url = "/inkubator_tempe_kedelai/write-data.php?data=";
url += datasensor;

Serial.print("Requesting URL: ");
Serial.println(url);

client.print(String("GET ") + url + " HTTP/1.1\r\n" +
    "Host: " + host + "\r\n" +
    "Connection: close\r\n\r\n");
unsigned long timeout = millis();
while (client.available() == 0) {
    if (millis() - timeout > 1000) {
        Serial.println(">>> Client Timeout !");
        client.stop();
        return;
    }
}

// Read all the lines of the reply from server and print them to Serial
while (client.available()) {
    String line = client.readStringUntil('\r');
    Serial.print(line);
}

```

```
Serial.println();
Serial.println("closing connection");
}
```

2. Write-data.php

```
<?php

//Variabel database
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "inkubator_tempe_kedelai";

$conn = mysqli_connect($servername, $username,
$password, $dbname);

// Prepare the SQL statement

$result = mysqli_query ($conn,"INSERT INTO datasensor (data)
VALUES (".S_GET["data"].")");


if (!$result)
{
    die ('Invalid query: ' .mysqli_error($conn));
}

?>
```

3. **Index.php**

```
<?php  
    require("koneksi.php"); // memanggil file koneksi.php untuk koneksi ke  
    database  
?>
```

```
<!DOCTYPE html>  
<html>  
<head>  
<meta http-equiv="refresh" content="5">  
</head>  
<body>  
<style>  
#wntable {  
    border-collapse: collapse;  
    width: 50%;  
}  
#wntable td, #wntable th {  
    border: 1px solid #ddd;  
    padding: 8px;  
}  
  
#wntable tr:nth-child(even){background-color: #f2f2f2;}  
  
#wntable tr:hover {background-color: #ddd;}  
  
#wntable th {  
    padding-top: 12px;  
    padding-bottom: 12px;  
    text-align: left;
```

The logo of Universitas Muhammadiyah Ponorogo is a purple shield-shaped emblem. It features a central golden sunburst with Arabic calligraphy in the center. The text 'UNIVERSITAS MUHAMMADIYAH' is written in white along the top curve of the shield, and 'PONOROGO' is written along the bottom curve. A green and white laurel wreath encircles the central sunburst. A white star is positioned at the bottom right of the shield.

```

        background-color: #00A8A9;
        color: white;
    }
</style>

<div id="cards" class="cards" align="center">
<h1> Data Sensor Kelembaban Inkubator Tempe Kedelai</h1>
<table id="wntable">
<tr>
<th>No</th>
<th>Suhu</th>
<th>Sistem</th>
<th>Waktu</th>
</tr>
<?php
    $sql = mysqli_query($koneksi, "SELECT * FROM datasensor ORDER
    BY id DESC");

    if(mysqli_num_rows($sql) == 0){
        echo '<tr><td colspan="4">Data Tidak Ada.</td></tr>'; // jika tidak
        ada entri di database maka tampilkan 'Data Tidak Ada.'
    }else { // jika terdapat entri maka tampilkan datanya
        $no = 1; // mewakili data dari nomor 1
        while($row = mysqli_fetch_assoc($sql)){ // fetch query yang sesuai
        ke dalam array
            echo '
<tr>
<td>'.$no.'</td>
<td>'.$row['suhu'].'</td>
<td>'.$row['sistem'].'</td>

```

```

<td>'.Srow['waktu'].'</td>
</tr>
    ;
    Sno++; // mewakili data kedua dan seterusnya
    }
    }
?>
</table>
</div>
</body>
</html>

```

4. Koneksi.php

```

<?php
//Variabel database
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "inkubator_tempe_kedelai";

$koneksi = mysqli_connect($servername, $username, $password,
$dbname); // menggunakan mysqli_connect

if(mysqli_connect_errno()){ // mengecek apakah koneksi database error
    echo 'Gagal melakukan koneksi ke Database :
'.mysqli_connect_error(); // pesan ketika koneksi database error
}
?>

```

5. **Database**

```
CREATE TABLE datasensor (  
  id INT(6) UNSIGNED AUTO_INCREMENT PRIMARY KEY,  
  suhu INT(10), sistem INT(10),  
  `waktu` TIMESTAMP NULL DEFAULT CURRENT_TIMESTAMP ON  
UPDATE CURRENT_TIMESTAMP)  
)
```

