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
<?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 ('".$_GET["data"]."')");

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

3. **Index.php**

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

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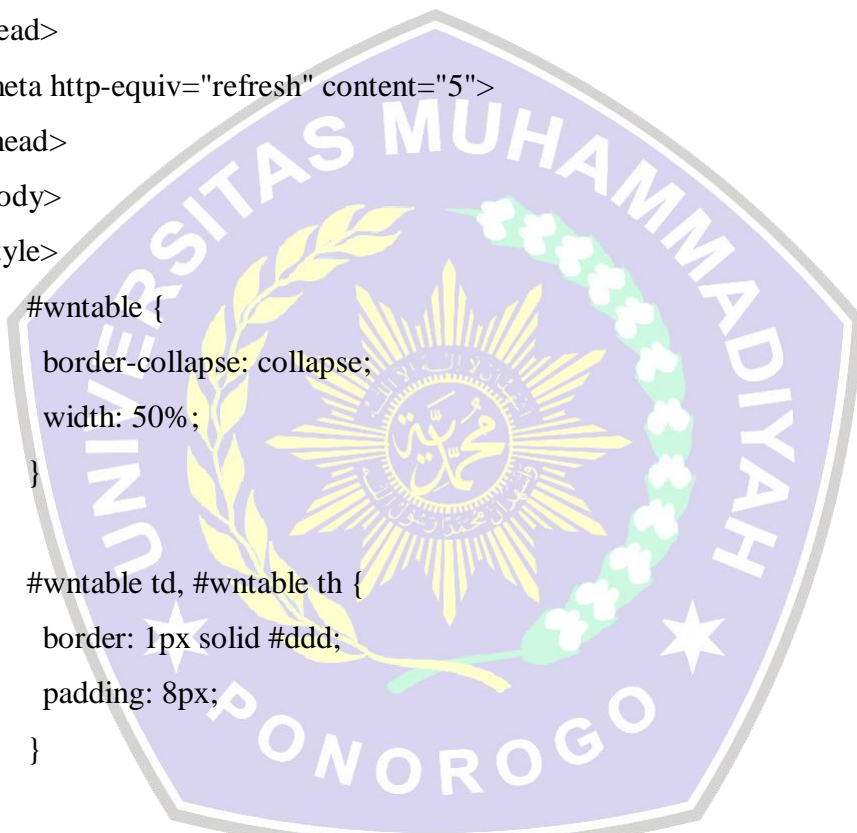
```
      background-color: #00A8A9;
      color: white;
    }
</style>

<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="14">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>'.$row['waktu'].'</td>

</tr>
    ';
    $no++; // mewakili data kedua dan seterusnya
  }
 }
?>
</table>
</div>
</body>
</html>
```

4. **Koneksi.php**

```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)

)