

APPENDIX

SENSOR CODE

```
#include "DHT.h"

#include <SPI.h>

#include <Ethernet.h>

byte mac[] = { 0xDE, 0xAD, 0xBE, 0xEF, 0xFE, 0xED };
```

SENSOR PIN

```
// ===== RUANG 1 =====

// SUHU

#define DHTPIN1 2

#define DHTTYPE1 DHT11

DHT dht1(DHTPIN1,DHTTYPE1);

float humidityData1;

float temperatureData1;

// TANAH

int sensor1 = A0;

int output_value1;

int map_value1;

// ===== RUANG 2 =====

// SUHU

#define DHTPIN2 3
```

```
#define DHTTYPE2 DHT11

DHT dht2(DHTPIN2,DHTTYPE2);

float humidityData2;

float temperatureData2;

// TANAH

int sensor2 = A1;

int output_value2;

int map_value2;
```

CONCECT SERVER

```
char server[] = "192.168.1.8";

IPAddress ip(192,168,1,103);

EthernetClient client;

void setup() {

  Serial.begin(9600);

  dht1.begin();

  dht2.begin();

  if (Ethernet.begin(mac) == 0) {

    Serial.println("Failed to configure Ethernet using DHCP");

    Ethernet.begin(mac, ip);

  }

  delay(1000);

}
```

```
//-----
```

DATA SENSOR

```
void loop() {  
    // RUANG 1  
  
    humidityData1 = dht1.readHumidity();  
    temperatureData1 = dht1.readTemperature();  
  
    output_value1= analogRead(sensor1);  
    map_value1 = map(output_value1,1000,0,0,150);  
  
    // RUANG 2  
  
    humidityData2 = dht2.readHumidity();  
    temperatureData2 = dht2.readTemperature();  
  
    output_value2= analogRead(sensor2);  
    map_value2 = map(output_value2,1000,0,0,150);  
  
    Sending_To_phpmyadmindatabase();  
    delay(3581000);  
}  
  
void Sending_To_phpmyadmindatabase()
```

```

{
    if (client.connect(server, 80)) {
        Serial.println("connected");

        // ===== RUANG 1 =====

        Serial.print("GET /projec/data.php?humidity1=");
        client.print("GET /projec/data.php?humidity1=");
        Serial.println(humidityData1);
        client.print(humidityData1);

        client.print("&temperature1=");
        Serial.println("&temperature1=");
        client.print(temperatureData1);
        Serial.println(temperatureData1);

        client.print("&tanah1=");
        Serial.println("&tanah1=");
        client.print(map_value1);
        Serial.println(map_value1);

        // ===== RUANG 2 =====

        client.print("&humidity2=");
        Serial.println("&humidity2=");
        client.print(humidityData2);
        Serial.println(humidityData2);
    }
}

```

```

client.print("&temperature2=");
Serial.println("&temperature2=");
client.print(temperatureData2);
Serial.println(temperatureData2);

client.print("&tanah2=");
Serial.println("&tanah2=");
client.print(map_value2);
Serial.println(map_value2);

client.print(" "); //SPACE BEFORE HTTP/1.1
client.print("HTTP/1.1");
client.println();
client.println("Host: 192.168.1.8");
client.println("Connection: close");
client.println();
} else {
// if you didn't get a connection to the server:
Serial.println("connection failed");
}
}

```

SANDING DATA TO SERVER

```

<?php
class data{
public $link='';
function __construct($humidity1, $temperature1, $tanah1,
$humidity2, $temperature2, $tanah2){

```

```

$this->connect();

$this->storeInDBRuang1($humidity1, $temperature1, $tanah1);

$this->storeInDBRuang2($humidity2, $temperature2, $tanah2);

}

// conek ke database

function connect(){

    $this->link = mysqli_connect('localhost','root','') or
die('Cannot connect to the DB');

    mysqli_select_db($this->link,'datasensor1') or die('Cannot
select the DB');

}

// insert data ke database

function storeInDBRuang1($humidity, $temperature, $tanah){

    $query = "insert into ruang1 set humidity='" . $humidity. "',
temperature='" . $temperature. "', tanah='" . $tanah ."'";

    $result = mysqli_query($this->link,$query) or die('Errant query:
' . $query);

}

// insert data ke database

function storeInDBRuang2($humidity, $temperature, $tanah){

    $query = "insert into ruang2 set humidity='" . $humidity. "',
temperature='" . $temperature. "', tanah='" . $tanah ."'";

    $result = mysqli_query($this->link,$query) or die('Errant query:
' . $query);

}

}

// menerima data dari sensor

```

```

if($_GET['humidity1'] != '' and $_GET['temperature1'] != '' and
$_GET['tanah1'] != '' and
$_GET['humidity2'] != '' and $_GET['temperature2'] != '' and
$_GET['tanah2'] != ''){
    $data=new data($_GET['humidity1'], $_GET['temperature1'],
$_GET['tanah1'], $_GET['humidity2'], $_GET['temperature2'],
$_GET['tanah2']);
}

```

?>

SELECT DATA

<?php

```

// konek database datasensor1
$konek = mysqli_connect("localhost","root","","datasensor1");
// tampilan terbaru database ruangan1
$result= mysqli_query ($konek," SELECT*From ruang1 ORDER BY id
DESC LIMIT 10");
// tampilan terbaru database ruangan2
$result2= mysqli_query ($konek," SELECT*From ruang2 ORDER BY id
DESC LIMIT 10");

```

```

//-----
RUANGAN
1-----
-----
//-----regresi linier humidity require
R1-----
$result11= mysqli_query ($konek," SELECT id From ruang1 LIMIT
24");

```

```
$result12= mysqli_query ($konek," SELECT humidity From ruang1  
LIMIT 24");
```

HITUNG PREDIKSI

```
//prediksi humidity ruang 1
```

```
$x2 = [];
```

```
while ($obj5=mysqli_fetch_assoc($result11)) {  
    array_push($x2, $obj5["id"]);  
}
```

```
$y2 = [];
```

```
while ($obj6=mysqli_fetch_assoc($result12)) {  
    array_push($y2, $obj6["humidity"]);  
}
```

```
$regresi2 = new RegresiLinier2($x2, $y2);
```

```
Class RegresiLinier2{
```

```
    public $x2,
```

```
        $y2,
```

```
        $n2,
```

```
        $x22,
```

```
        $y22,
```

```
        $xy2,
```

```
        $a2,
```



```

        $b2,

        $all2;

public function __construct($x2=null, $y2=null){
    if(!is_null($x2) && !is_null($y2)){
        $this->x2 = $x2;
        $this->y2 = $y2;
        $this->compute2();
    }
}

public function compute2(){
    if(is_array($this->x2) && is_array($this->y2)){
        if(count($this->x2) == count($this->y2)){
            $this->n2 = count($this->x2);

            $this->prepare_calculation2();

            $this->ab2();

            $this->linear_regression2();
        }
        else{
            throw new Exception2(' X dan Y harus sama');
        }
    }
}

```

```

else{
    throw new Exception2(' X atau Y kosong');
}
}

public function prepare_calculation2(){

    $this->x22 = array_map(function($n2){
        return $n2 * $n2;
    }, $this->x2);
    $this->y22 = array_map(function($n2){
        return $n2 * $n2;
    }, $this->y2);

    for($i=0; $i<$this->n2; $i++){
        $this->xy2[$i] = $this->x2[$i] * $this->y2[$i];
    }

}

public function ab2(){

    $a2 = ((array_sum($this->y2) * array_sum($this->x22)) -
(array_sum($this->x2) * array_sum($this->xy2))) / (($this->n2 *
array_sum($this->x22)) - (array_sum($this->x2) * array_sum($this-
>x2)));

    $this->a2 = $a2;
}

```

```

        $b2 = (($this->n2 * array_sum($this->xy2)) -
(array_sum($this->x2) * array_sum($this->y2))) / (($this->n2 *
array_sum($this->x22)) - (array_sum($this->x2) * array_sum($this-
>x2)));

```

```

        $this->b2 = $b2;

```

```

    }

```

```

    public function forecast2($xfore2){

```

```

        $y2 = $this->a2 + ($this->b2 * $xfore2 );

```

```

        return $y2;

```

```

    }

```

```

    public function linear_regression2(){

```

```

        $n2 = 25;

```

```

        // $this->forecast(25);

```

```

        foreach($this->x2 as $xnew2){

```

```

            $this->all2[$n2] = $this->forecast2($n2);

```

```

            $n2++;

```

```

        }

```

```

    }

```

```

}

```

```

//-----regresi        linier        suhu        require

```

```

R1-----

```

```

$result15= mysqli_query ($konek," SELECT id From ruang1 LIMIT
24");

$result16= mysqli_query ($konek," SELECT temperature From ruang1
LIMIT 24");

//prediksi suhu ruang 1

$x4 = [];

while ($obj7=mysqli_fetch_assoc($result15)) {
    array_push($x4, $obj7["id"]);
}

$y4 = [];
while ($obj8=mysqli_fetch_assoc($result16)) {
    array_push($y4, $obj8["temperature"]);
}

$regresi4 = new RegresiLinier4($x4, $y4);

Class RegresiLinier4{

    public $x4,
        $y4,
        $n4,

        $x44,
        $y44,

```

```
$xy4,  
$a4,  
$b4,  
  
$all4;
```

```
public function __construct($x4=null, $y4=null){  
    if(!is_null($x4) && !is_null($y4)){  
        $this->x4 = $x4;  
        $this->y4 = $y4;  
        $this->compute4();  
    }  
}  
  
public function compute4(){  
    if(is_array($this->x4) && is_array($this->y4)){  
        if(count($this->x4) == count($this->y4)){  
            $this->n4 = count($this->x4);  
  
            $this->prepare_calculation4();  
            $this->ab4();  
            $this->linear_regression4();  
        }  
        else{  
            throw new Exception4(' X dan Y harus sama');  
        }  
    }  
}
```

```

    }
    else{
        throw new Exception4(' X atau Y kosong');
    }
}

```

```

public function prepare_calculation4(){

```

```

    $this->x44 = array_map(function($n4){
        return $n4 * $n4;
    }, $this->x4);

```

```

    $this->y44 = array_map(function($n4){
        return $n4 * $n4;
    }, $this->y4);

```

```

    for($i=0; $i<$this->n4; $i++){

```

```

        $this->xy4[$i] = $this->x4[$i] * $this->y4[$i];

```

```

    }

```

```

}

```

```

public function ab4(){

```

```

    $a4 = ((array_sum($this->y4) * array_sum($this->x44)) -
(array_sum($this->x4) * array_sum($this->xy4))) / (($this->n4 *

```

```
array_sum($this->x44)) - (array_sum($this->x4) * array_sum($this->x4));
```

```
    $this->a4 = $a4;
```

```
        $b4 = (($this->n4 * array_sum($this->xy4)) -  
(array_sum($this->x4) * array_sum($this->y4))) / (($this->n4 *  
array_sum($this->x44)) - (array_sum($this->x4) * array_sum($this->x4)));
```

```
    $this->b4 = $b4;
```

```
    }
```

```
public function forecast4($xfore4){  
    $y4 = $this->a4 + ($this->b4 * $xfore4 );  
    return $y4;
```

```
    }
```

```
public function linear_regression4(){  
    $n4 = 25;  
    // $this->forecast(44);  
    foreach($this->x4 as $xnew4){  
        $this->all4[$n4] = $this->forecast4($n4);  
        $n4++;
```

```
    }
```

```
    }
```

```
}
```

```

//-----regresi linier tanah require
R1-----

$result7= mysqli_query ($konek," SELECT id From ruang1 LIMIT
24");

$result8= mysqli_query ($konek," SELECT tanah From ruang1 LIMIT
24");

//prediksi tanah ruang 1

$x = [];

while ($obj1=mysqli_fetch_assoc($result7)) {
    array_push($x, $obj1["id"]);
}

$y = [];

while ($obj2=mysqli_fetch_assoc($result8)) {
    array_push($y, $obj2["tanah"]);
}

$regresi = new RegresiLinier($x, $y);

```

```

Class RegresiLinier{

```

```

    public $x,
           $y,
           $n,

```


\$x2,

\$y2,

\$xy,

\$a,

\$b,

\$all;

```
public function __construct($x=null, $y=null) {
    if(!is_null($x) && !is_null($y)){
        $this->x = $x;
        $this->y = $y;
        $this->compute();
    }
}

public function compute() {
    if(is_array($this->x) && is_array($this->y)){
        if(count($this->x) == count($this->y)){
            $this->n = count($this->x);

            $this->prepare_calculation();
            $this->ab();
            $this->linear_regression();
        }
    }
    else{
```

```

        throw new Exception(' X dan Y harus sama');
    }

}

else{
    throw new Exception(' X atau Y kosong');
}
}

public function prepare_calculation(){

    $this->x2 = array_map(function($n){
        return $n * $n;
    }, $this->x);
    $this->y2 = array_map(function($n){
        return $n * $n;
    }, $this->y);

    for($i=0; $i<$this->n; $i++){
        $this->xy[$i] = $this->x[$i] * $this->y[$i];
    }

}

public function ab(){

```

```

    $a = ((array_sum($this->y) * array_sum($this->x2)) -
(array_sum($this->x) * array_sum($this->xy))) / (($this->n *
array_sum($this->x2)) - (array_sum($this->x) * array_sum($this-
>x)));

```

```

    $this->a = $a;

```

```

    $b = (($this->n * array_sum($this->xy)) -
(array_sum($this->x) * array_sum($this->y))) / (($this->n *
array_sum($this->x2)) - (array_sum($this->x) * array_sum($this-
>x)));

```

```

    $this->b = $b;

```

```

}

```

```

public function forecast($xfore){

```

```

    $y = $this->a + ($this->b * $xfore );

```

```

    return $y;

```

```

}

```

```

public function linear_regression(){

```

```

    $n = 25;

```

```

    // $this->forecast(11);

```

```

    foreach($this->x as $xnew){

```

```

        $this->all[$n] = $this->forecast($n);

```

```

        $n++;

```

```

    }

```

```

}

```

```

    }

//-----
RUANGAN
2-----
-----

//-----regresi    linier    humidity    require
R2-----

$result13= mysqli_query ($konek," SELECT id From ruang2 LIMIT
24");

$result14= mysqli_query ($konek," SELECT humidity From ruang2
LIMIT 24");

//prediksi humidity ruang 2

$x3 = [];
while ($obj7=mysqli_fetch_assoc($result13)) {
    array_push($x3, $obj7["id"]);
}

$y3 = [];
while ($obj8=mysqli_fetch_assoc($result14)) {
    array_push($y3, $obj8["humidity"]);
}

$regresi3 = new RegresiLinier3($x3, $y3);

```

```

Class RegresiLinier3{

```

```

public $x3,
      $y3,
      $n3,

      $x33,
      $y33,
      $xy3,
      $a3,
      $b3,

      $all3;

public function __construct($x3=null, $y3=null){
    if(!is_null($x3) && !is_null($y3)){
        $this->x3 = $x3;
        $this->y3 = $y3;
        $this->compute3();
    }
}

public function compute3(){
    if(is_array($this->x3) && is_array($this->y3)){
        if(count($this->x3) == count($this->y3)){
            $this->n3 = count($this->x3);

            $this->prepare_calculation3();
        }
    }
}

```

```

        $this->ab3();

        $this->linear_regression3();
    }

    else{

        throw new Exception3(' X dan Y harus sama');
    }

}

else{

    throw new Exception3(' X atau Y kosong');
}
}

public function prepare_calculation3(){

    $this->x33 = array_map(function($n3){
        return $n3 * $n3;
    }, $this->x3);

    $this->y33 = array_map(function($n3){
        return $n3 * $n3;
    }, $this->y3);

    for($i=0; $i<$this->n3; $i++){

        $this->xy3[$i] = $this->x3[$i] * $this->y3[$i];
    }
}

```

```

}

public function ab3(){

    $a3 = ((array_sum($this->y3) * array_sum($this->x33)) -
(array_sum($this->x3) * array_sum($this->xy3))) / (($this->n3 *
array_sum($this->x33)) - (array_sum($this->x3) * array_sum($this-
>x3)));

    $this->a3 = $a3;

    $b3 = (($this->n3 * array_sum($this->xy3)) -
(array_sum($this->x3) * array_sum($this->y3))) / (($this->n3 *
array_sum($this->x33)) - (array_sum($this->x3) * array_sum($this-
>x3)));

    $this->b3 = $b3;
}

public function forecast3($xfore3){

    $y3 = $this->a3 + ($this->b3 * $xfore3 );

    return $y3;

}

public function linear_regression3(){

    $n3 = 25;

    // $this->forecast(33);

    foreach($this->x3 as $xnew3){

        $this->a113[$n3] = $this->forecast3($n3);

        $n3++;
    }
}

```

```

    }
}

}

//-----regresi linier suhu require
R2-----

$result17= mysqli_query ($konek," SELECT id From ruang2 LIMIT
24");

$result18= mysqli_query ($konek," SELECT temperature From ruang2
LIMIT 24");

//prediksi suhu ruang 2
$x5 = [];
while ($obj9=mysqli_fetch_assoc($result17)) {
    array_push($x5, $obj9["id"]);
}
$y5 = [];
while ($obj10=mysqli_fetch_assoc($result18)) {
    array_push($y5, $obj10["temperature"]);
}

$regresi5 = new RegresiLinier5($x5, $y5);

Class RegresiLinier5{

```



```

public $x5,
       $y5,
       $n5,

       $x55,
       $y55,
       $xy5,
       $a5,
       $b5,

       $all5; //forecast y value based on linear regression

public function __construct($x5=null, $y5=null){
    if(!is_null($x5) && !is_null($y5)){
        $this->x5 = $x5;
        $this->y5 = $y5;
        $this->compute5();
    }
}

public function compute5(){
    if(is_array($this->x5) && is_array($this->y5)){
        if(count($this->x5) == count($this->y5)){
            $this->n5 = count($this->x5);

            $this->prepare_calculation5();
        }
    }
}

```

```

        $this->ab5();

        $this->linear_regression5();
    }

    else{

        throw new Exception5(' X dan Y harus sama');

    }

}

else{

    throw new Exception5(' X atau Y kosong');

}

}

public function prepare_calculation5(){

    $this->x55 = array_map(function($n5){

        return $n5 * $n5;

    }, $this->x5);

    $this->y55 = array_map(function($n5){

        return $n5 * $n5;

    }, $this->y5);

    for($i=0; $i<$this->n5; $i++){

        $this->xy5[$i] = $this->x5[$i] * $this->y5[$i];

    }

```

```

}

public function ab5(){

    $a5 = ((array_sum($this->y5) * array_sum($this->x55)) -
(array_sum($this->x5) * array_sum($this->xy5))) / (($this->n5 *
array_sum($this->x55)) - (array_sum($this->x5) * array_sum($this-
>x5)));

    $this->a5 = $a5;

    $b5 = (($this->n5 * array_sum($this->xy5)) -
(array_sum($this->x5) * array_sum($this->y5))) / (($this->n5 *
array_sum($this->x55)) - (array_sum($this->x5) * array_sum($this-
>x5)));

    $this->b5 = $b5;
}

public function forecast5($xfore5){

    $y5 = $this->a5 + ($this->b5 * $xfore5 );

    return $y5;

}

public function linear_regression5(){

    $n5 = 25;

    // $this->forecast(55);

    foreach($this->x5 as $xnew5){

        $this->a115[$n5] = $this->forecast5($n5);

        $n5++;
    }
}

```

```

    }
}

}

//-----regresi linier tanah require
R2-----
//regresi linier tanah R2
$result9= mysqli_query ($konek," SELECT id From ruang2 LIMIT
24");
$result10= mysqli_query ($konek," SELECT tanah From ruang2
LIMIT 24");

//prediksi tanah ruang 2
$x1 = [];
while ($obj3=mysqli_fetch_assoc($result9)) {
    array_push($x1, $obj3["id"]);
}
$y1 = [];
while ($obj4=mysqli_fetch_assoc($result10)) {
    array_push($y1, $obj4["tanah"]);
}

$regresi1 = new RegresiLinier1($x1, $y1);

```

```
Class RegresiLinier1{
```

```
    public $x1,  
           $y1,  
           $n1,
```

```
           $x21,
```

```
           $y21,
```

```
           $xy1,
```

```
           $a1,
```

```
           $b1,
```

```
           $all1;
```

```
    public function __construct($x1=null, $y1=null){
```

```
        if(!is_null($x1) && !is_null($y1)){
```

```
            $this->x1 = $x1;
```

```
            $this->y1 = $y1;
```

```
            $this->compute1();
```

```
        }
```

```
    }
```

```
    public function compute1(){
```

```
        if(is_array($this->x1) && is_array($this->y1)){
```

```
            if(count($this->x1) == count($this->y1)){
```

```

        $this->n1 = count($this->x1);

        $this->prepare_calculation1();
        $this->ab1();
        $this->linear_regression1();
    }
    else{
        throw new Exception1(' X dan Y harus sama');
    }
}
else{
    throw new Exception1(' X atau Y kosong');
}
}

public function prepare_calculation1(){

    $this->x21 = array_map(function($n1){
        return $n1 * $n1;
    }, $this->x1);

    $this->y21 = array_map(function($n1){
        return $n1 * $n1;
    }, $this->y1);

    for($i=0; $i<$this->n1; $i++){

```

```

        $this->xy1[$i] = $this->x1[$i] * $this->y1[$i];
    }

}

public function ab1(){

    $a1 = ((array_sum($this->y1) * array_sum($this->x21)) -
(array_sum($this->x1) * array_sum($this->xy1))) / (($this->n1 *
array_sum($this->x21)) - (array_sum($this->x1) * array_sum($this-
>x1)));

    $this->a1 = $a1;

    $b1 = (($this->n1 * array_sum($this->xy1)) -
(array_sum($this->x1) * array_sum($this->y1))) / (($this->n1 *
array_sum($this->x21)) - (array_sum($this->x1) * array_sum($this-
>x1)));

    $this->b1 = $b1;

}

public function forecast1($xfore1){

    $y1 = $this->a1 + ($this->b1 * $xfore1 );

    return $y1;

}

public function linear_regression1(){

    $n1 = 25;

    // $this->forecast(11);

```

```
        foreach($this->x1 as $xnew1){
            $this->all1[$n1] = $this->forecast1($n1);
            $n1++;
        }
    }
}
```

}

?>

WEB DISPLAY

```
<!DOCTYPE html>
<html>
  <head>
    <title>MONITORING_SENSOR</title>
  </head>

  <body>
    <center>
      <font size="8" face="Bernard MT Condensed"
color="#A9A9A9">DATA SENSOR</font><br></br>
```




```
<!-- -----RUANGAN 1----- -->
```

```
<table>
```

```
<tr>
```

```
<td>
```

```
<table border="1">
```

```
<tr>
```

```
<th rowspan="2" bgcolor="yellow">NO.</th>
```

```
<th colspan="4" bgcolor="#00ff80">RUANGAN
```

```
1</th>
```

```
</tr>
```

```
<tr>
```

```
<th bgcolor="#6495ED">Humidity</th>
```

```
<th bgcolor="#6495ED">Temperature</th>
```

```
<th bgcolor="#6495ED">K.Tanah</th>
```

```
<th bgcolor="#FFA500">Date</th>
```

```
</tr>
```

```
<?php while ($row=mysqli_fetch_assoc($result)):?>
```

```
<tr>
```

```
<td><?php echo $row["id"]; ?></td>
```

```
<td><?php echo $row["humidity"]; ?> RH</td>
```

```
<td><?php echo $row["temperature"]; ?> C</td>
```

```
<td><?php echo $row["tanah"]; ?> %</td>
```

```
<td><?php echo $row["date"]; ?></td>
```

```
</tr>
```

```

                <?php endwhile; ?>
            </table>
        </td>

    <td></td>

<!-- -----RUANGAN 2----- -->

<td>
    <table border="1">
        <tr>
            <th rowspan="2" bgcolor="yellow">NO.</th>
            <th colspan="4" bgcolor="#00ff80">RUANGAN
2</th>
        </tr>
        <tr>
            <th bgcolor="#6495ED">Humidity</th>
            <th bgcolor="#6495ED">Temperature</th>
            <th bgcolor="#6495ED">K.Tanah</th>
            <th bgcolor="#FFA500">Date</th>
        </tr>

<?php while ($row2=mysqli_fetch_assoc($result2)):?>

    <tr>
        <td><?php echo $row2["id"]; ?></td>
        <td><?php echo $row2["humidity"]; ?> RH</td>
        <td><?php echo $row2["temperature"]; ?> C</td>

```

```

        <td><?php echo $row2["tanah"]; ?> %</td>

        <td><?php echo $row2["date"]; ?></td>

    </tr>

    <?php endwhile; ?>

</table>

</td>

</tr>

</table>

</center>

<br></br>

<!-- -----TABEL PREDIKSI-----
-->

<center>

<table>

<tr>

<!-- -----PREDIKSI RUANGAN
1----->

<table border="1">

<tr>

<th rowspan="1" bgcolor="yellow">KTRNG</th>

<th colspan="24" bgcolor="#00ff80">PREDIKSI
RUANGAN 1 --[ H+1 ]--</th>

</tr>

<tr>

<th rowspan="1"
bgcolor="#FFA500">Periode/Jam</th>

```

<th bgcolor="#9ACD32">25</th>

<th bgcolor="#9ACD32">26</th>

<th bgcolor="#9ACD32">27</th>

<th bgcolor="#9ACD32">28</th>

<th bgcolor="#9ACD32">29</th>

<th bgcolor="#9ACD32">30</th>

<th bgcolor="#9ACD32">31</th>

<th bgcolor="#9ACD32">32</th>

<th bgcolor="#9ACD32">33</th>

<th bgcolor="#9ACD32">34</th>

<th bgcolor="#9ACD32">35</th>

<th bgcolor="#9ACD32">36</th>

<th bgcolor="#9ACD32">37</th>

<th bgcolor="#9ACD32">38</th>

<th bgcolor="#9ACD32">39</th>

<th bgcolor="#9ACD32">40</th>

<th bgcolor="#9ACD32">41</th>

<th bgcolor="#9ACD32">42</th>

<th bgcolor="#9ACD32">43</th>

<th bgcolor="#9ACD32">44</th>

<th bgcolor="#9ACD32">45</th>

<th bgcolor="#9ACD32">46</th>

<th bgcolor="#9ACD32">47</th>

<th bgcolor="#9ACD32">48</th>

</tr>

<tr>

```

        <th rowspan="1" bgcolor="#6495ED">Humidity</
th>

        <?php foreach ($regresi2->all2 as $data2)
{echo "<td>".$data2 = number_format($data2, 2, '.', '')."</td>";}?
>

        </tr>

        <tr>

                <th rowspan="1"
bgcolor="#6495ED">Temperature</th>

                <?php foreach ($regresi4->all4 as $data4)
{echo "<td>".$data4 = number_format($data4, 2, '.', '')."</td>";}?
>

                </tr>

                <tr>

                        <th rowspan="1"
bgcolor="#6495ED">K.Tanah</th>

                        <?php foreach ($regresi->all as $periode1)
{echo  "<td>".$periode1=  number_format($periode1,  2,  '.',
'')."</td>";}?>

                        </tr>

                </table>

        </td>

<br></br>

        <!-- -----PREDIKSI        RUANGAN
2----->

        <td>

                <table border="1">

                        <tr>

```

```
<th rowspan="1" bgcolor="yellow">KTRNG</th>
      <th colspan="24" bgcolor="#00ff80">PREDIKSI
RUANGAN 2 --[ H+1 ]--</th>
</tr>
<tr>
  <th rowspan="1" bgcolor="#FFA500">Periode/Jam</th>
  <th bgcolor="#9ACD32">25</th>
  <th bgcolor="#9ACD32">26</th>
  <th bgcolor="#9ACD32">27</th>
  <th bgcolor="#9ACD32">28</th>
  <th bgcolor="#9ACD32">29</th>
  <th bgcolor="#9ACD32">30</th>
  <th bgcolor="#9ACD32">31</th>
  <th bgcolor="#9ACD32">32</th>
  <th bgcolor="#9ACD32">33</th>
  <th bgcolor="#9ACD32">34</th>
  <th bgcolor="#9ACD32">35</th>
  <th bgcolor="#9ACD32">36</th>
  <th bgcolor="#9ACD32">37</th>
  <th bgcolor="#9ACD32">38</th>
  <th bgcolor="#9ACD32">39</th>
  <th bgcolor="#9ACD32">40</th>
  <th bgcolor="#9ACD32">41</th>
  <th bgcolor="#9ACD32">42</th>
  <th bgcolor="#9ACD32">43</th>
  <th bgcolor="#9ACD32">44</th>
  <th bgcolor="#9ACD32">45</th>
```

```

        <th bgcolor="#9ACD32">46</th>
        <th bgcolor="#9ACD32">47</th>
        <th bgcolor="#9ACD32">48</th>
    </tr>

    <tr>
        <th rowspan="1" bgcolor="#6495ED">Humidity</th>
        <?php foreach ($regresi3->all13 as $data3) {echo
"<td>".$data3= number_format($data3, 2, '.', '')."</td>";}?>
    </tr>
    <tr>
        <th rowspan="1" bgcolor="#6495ED">Temperature</th>
        <?php foreach ($regresi5->all15 as $data5) {echo
"<td>".$data5= number_format($data5, 2, '.', '')."</td>";}?>
    </tr>
    <tr>
        <th rowspan="1" bgcolor="#6495ED">K.Tanah</th>
        <?php foreach ($regresi1->all11 as $periode) {echo
"<td>".$periode= number_format($periode, 2, '.', '')."</td>";}?>
    </tr>
</table>

</tr>
</table>
</center>

</body>/
</html>

```



0.65% PLAGIARISM
APPROXIMATELY

Report #11013114

Introduction Background Moisture in a region is affected considerably by the high and low levels of water contained in the soil. The level of groundwater is indicated by the large amount of water suspended underground. The moisture level of the ground is the principal factor in determining the dry and absence of the soil in a region. The lower the moisture content of the soil in a region, the greater the risk of drought in the region. Fact is that moisture levels can control the growth of vegetation, the soil's resistance to erosion, and the hydrologic cycles of soil. Moisture levels are also visible from the violent levels of the ground's surface, the louder the surface of the ground, the lower the moisture level on the soil. Soil moisture is greatly affected by the sun's heat that makes evaporation of the water contained inside the soil very rapidly. For the ground inside also experienced the same thing but tended to be slower. The study collected data from air humidity, room temperature, and soil humidity in the interior because the soil in the room also experienced a significant drop in soil humidity. The study was to predict and know the effects of air humidity and room temperature on Arduino based soils in two rooms that had humidity levels and different room temperatures that were in air conditioners and those that did not use air conditioning. With data obtained can be compared to the levels of