Login Code:

```
<?php include('server.php') ?>
<!DOCTYPE html>
<html>
<head>

	<title>Log In</title>
	<link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>

	<div class="header">
	<h2>Log In</h2>
	</div>

	<form method="post" action="login.php">

		<?php include('errors.php'); ?>

		<div class="input-group">

	<label>Username</label>
			<input type="text" name="username" >
		</div>
		<div class="input-group">
	<label>Password</label>
			<input type="password" name="password">
		</div>

		<div class="input-group">
			<button type="submit" class="btn btn-success" name="login_user">Login</button>
		</div>
		<p>
			Don&#39;t have an account? <a href="register.php">Sign up</a>
		</p>
	</form>

</body>
</html>
```

Get Status:

```
<?php
  include_once('server.php');

  // Check connection
  if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
  }
```

```
date_default_timezone_set("Asia/Karachi");
   $device_name    =
$_GET['device_name'];


   $sql           =   "SELECT device_status
FROM devices_status WHERE
device_name='$device_name'";
   $result        =   $conn->query($sql);
   if ($result->num_rows > 0) {
      while($row = $result->fetch_assoc())
      {
         echo $row['device_status'];
      }
   } else {
      echo "Error:" . $sql . "<br>" . $conn-
>error;
   }


   $conn->close();
?>
```

Live data:

```
<!DOCTYPE html>
<html>
<head>
<style type="text/css">
.table_titles {
  border: 1px solid #dddddd;
  text-align: left;
  padding: 8px;
}
.table_titles {
  border: 1px solid #dddddd;
  text-align: left;
  padding: 8px;
}
.form-inline{
        width: 47%;
        height: auto;
        color: black;
        background-color: whitesmoke;
        text-align: center;
        padding: 10px;
    }
.submit{
    padding: 5px;
            font-size: 13px;
            color: white;
            background: #ADD8E6;
            border: none;
            border-radius: 5px;
    }
.header {
            width: 45%;
    height: 15px;
            margin: 10px auto 0px;
            color: white;
```

```
        background: #5F9EA0;
        text-align: center;
        border: 1px solid #B0C4DE;
        border-bottom: none;
        border-radius: 10px 10px 0px 0px;
        padding: 20px;
}
      .table_cells_odd{
       border: 1px solid #dddddd;
  text-align: left;
  padding: 8px;
      }
      .table_cells_even{
       border: 1px solid #dddddd;
        text-align: left;
        padding: 8px;
        background-color: #dddddd;
      }
table {
border: 1px solid #dddddd;
}
body { font-family: "Trebuchet MS", Courier; }
</style>
<body>
<?php
$url=$_SERVER['REQUEST_URI'];
header("Refresh: 5; URL=$url"); // Refresh the webpage every 5 seconds
?>


<center>
   <a href="index.php">Go Back to Previous Page</a>
   <div class="header">
                  <font size="5px">Data From Wireless Sensor Network</font>
          </div>
<form method="post" action="search.php" class="form-inline">
  <div>
    <label>Search By Date</label>
    <input type="date" name="date_from" value="<?php echo date('Y-m-d'); ?>"  />
  <button type="submit" class="submit" name="search">Search</button>
     </div>
</form>
<table border="0" cellspacing="0" cellpadding="4">
<tr>
<td class="table_titles">ID</td>
<td class="table_titles">Temperature(in °C)</td>
<td class="table_titles">Humidity(in %)</td>
<td class="table_titles">LPG(in ppm)</td>
<td class="table_titles">Time</td>
<td class="table_titles">Date</td>
</tr>
```

```
<?php
include('connection.php');
   $s = "select * from temps";
$result = mysqli_query($con,$s);
$count = mysqli_num_rows($result);
$p=$count/15;
$pn=ceil($p);
$page="";
$page=$_GET['page'];
   if($page=="" || $page=="1")
   {
      $page1=0;
      $page1=0;
   }
   else{
      $page1=($page*15)-15;
   }
$rec=mysqli_query($con,"SELECT * FROM temps ORDER BY id DESC limit $page1,15");
while($row = mysqli_fetch_array($rec))
{
$oddrow = true;
while($row = mysqli_fetch_array($rec))
{
if ($oddrow)
{
$css_class=' class="table_cells_odd"';
}
else
{
$css_class=' class="table_cells_even"';
}
$oddrow = !$oddrow;


echo "<tr>";
echo "<td '.$css_class.'>"  .$row['id'] . "</td>";
echo "<td '.$css_class.'>"  .$row['temp'] . "</td>";
echo "<td '.$css_class.'>"  .$row['humidity'] . "</td>";
echo "<td '.$css_class.'>"  .$row['lpg'] . "</td>";
echo "<td '.$css_class.'>"  .$row['time'] . "</td>";
echo "<td '.$css_class.'>"  .$row['dated'] . "</td>";
echo "</tr>";
}
}


?>
</table></center>
 <?php   for($b=1; $b<=$pn; $b++)
{
   ?> <a href="livedata.php?page=<?php echo $b; ?>" style="text-decoration:none" ><?php echo $b.""; ?></a><?php
```

```
}
   // Close the connection
mysqli_close($con);
   ?>
</body>
</html>
```

Status Page:

```
<!DOCTYPE html>
<html lang="en">
   <head>
                  <meta charset="UTF-8" />
      <meta http-equiv="X-UA-Compatible"
content="IE=edge,chrome=1">
                  <meta name="viewport"
content="width=device-width, initial-
scale=1.0">
      <title>Controlling Page</title>

      <link rel="stylesheet" type="text/css"
href="css/style.css" />

   </head>
   <body>

   <?php
   include_once('server.php');
   if(isset($_GET['device_status']))
   {

      $status = $_GET['device_status'];
      if($status==1)
      {
       $update_status = 0;
      }
      elseif($status==0)
      {
       $update_status = 1;
      }
      $query = "UPDATE devices_status
SET device_status='$update_status'
WHERE device_name='home_sensor'";
      $conn->query($query);
   }

   $get_status_sql = "SELECT
device_status FROM devices_status
WHERE device_name='home_sensor'";
```

```
$result = $conn->query($get_status_sql);

if ($result->num_rows > 0) {
while($row = $result->fetch_assoc())
{
$current_status = $row['device_status'];

if($current_status == 1)
{
$checked = 'checked';
}
else
{
$checked = '';
}
}
}

?>

<div class="container">

<section class="main">

<h1 style="text-align: center; padding: 30px; font-size: 35px; font-family: fantasy;">Control Sensor Data with PHP and MySQL</h1>

<div class="switch demo3">

<input onClick="location.href='<?php echo $_SERVER['PHP_SELF']; ?>?device_status=<?php echo $current_status; ?>'" type="checkbox" value="<?php echo $current_status;?>" <?php echo $checked;?> />

<label><i></i></label>

</div>

<h4 style="text-align: center;">&copyAll rights reserved by  <a href="http://mte.ruet.ac.bd/" target="_blank">Dept. of Mechatronics Engineering, RUET</a></h4>

</section>

</div>

</body>
</html>
```

Server :

```
<?php
   $servername = "localhost";
   $username = "root";
   $password = "";
   $dbname = "temperature";
   // Create connection
    $conn =
        mysqli_connect($servername,
$username,$password);
   $connection =
mysqli_select_db($conn,$dbname);
?>
```

Index :

```
<?php
        session_start();


        if (!isset($_SESSION['username'])) {
                $_SESSION['msg'] = "You
must log in first";
                header('location:home.php');
        }
        if (isset($_GET['logout'])) {
                session_destroy();

        unset($_SESSION['username']);
                header("location:
home.php");
        }

?>
<!DOCTYPE html>
<html>
<head>
   <meta charset="UTF-8" />
   <meta http-equiv="X-UA-Compatible"
content="IE=edge,chrome=1">
   <meta name="viewport"
content="width=device-width, initial-
scale=1.0">
          <title>Home</title>
          <link rel="stylesheet"
type="text/css" href="style.css">
   <style type="text/css">
       .table_cells_odd{
        border: 1px solid #dddddd;
  text-align: left;
  padding: 8px;
       }
       .table_cells_even{
        border: 1px solid #dddddd;
          text-align: left;
          padding: 8px;
          background-color: #dddddd;
       }
   </style>

</head>
```

```
<body>
        <div class="header">
                <h2>Home Page</h2>
        </div>

   <!-- notification message -->
                <?php if (isset($_SESSION['success'])) : ?>
                <?php endif ?>

                <!-- logged in user information -->
                <?php  if (isset($_SESSION['username'])) : ?>
                        <div class="content">
            <p>Welcome <strong><?php echo $_SESSION['username']; ?></strong></p>
                        <p> <a href="index.php?logout='1'" style="color: red;">logout</a> </p>
                <?php endif ?>
   </div>
 <div class="content">
    <p style="color: black;">Now you can control your device status from <a href="http://localhost/device_controll/status_page.php" target="_blank" style="color: red;">here</a> to prevent auto collection of sensors data. If you turn it off, controller data will not be saved to the database.</p>
</div>
<?php
   include_once('server2.php');
   //Light_Code

    if(isset($_GET['light_status']))
   {

     $status  =  $_GET['light_status'];
     if($status==1)
     {
      $update_status  =  1;
     }
     elseif($status==0)
     {
      $update_status  =  0;
     }
     $query  =  "UPDATE light_status SET light_status='$update_status' WHERE name='light_sensor'";
     $conn->query($query);
   }


 ?>
 <div class="content">
<button type="button" ><a href="index.php?light_status=1"> RELAY ON</a></button>
<button type="button" ><a href="index.php?light_status=0"> RELAY OFF</a></button><br>
```

```
  Sensor value is : <span id="ADCValue">0</span><br>

    LED State is : <span id="LEDState">NA</span>


     </div>


<center>  <table border="0" cellspacing="0" cellpadding="4">

<tr>

<td class="table_titles">Name</td>

<td class="table_titles">Highest Value</td>

<td class="table_titles">Lowest Value</td>

<td class="table_titles">Average Value</td>

</tr>

     <?php


require_once('connection.php');

$s = "select * from temps";

$result = mysqli_query($con,$s);

$count = mysqli_num_rows($result);

echo "Total Number of Stored Data: " .$count. " " ;


     $query="SELECT max(temp) as 'hightemp' FROM temps";

    $res=mysqli_query($con, $query);

    $data= mysqli_fetch_array($res);

    $field1a= $data["hightemp"];

       $query="SELECT min(temp) as 'lowtemp' FROM temps";

    $res=mysqli_query($con, $query);

    $data= mysqli_fetch_array($res);

    $field2a= $data['lowtemp'];

       $query="SELECT avg(temp) as 'avgtemp' FROM temps";

    $res=mysqli_query($con, $query);

    $data= mysqli_fetch_array($res);

    $field3a= $data['avgtemp'];


            ?><tr>

                <td class="table_cells_even"> Temperature </td>

                <td class="table_cells_even"><?php echo "    $field1a" ?></td>

                <td class="table_cells_even"><?php echo "   $field2a" ?></td>

                <td class="table_cells_even"><?php echo "   $field3a" ?></td>

                </tr>

    <?php


       $query="SELECT max(humidity) as 'highhum' FROM temps";

    $res=mysqli_query($con, $query);

    $data= mysqli_fetch_array($res);

    $field1b= $data["highhum"];
```

```
    $query="SELECT min(humidity) as 'lowhum' FROM temps";
   $res=mysqli_query($con, $query);
   $data= mysqli_fetch_array($res);
   $field2b= $data["lowhum"];
    $query="SELECT avg(humidity) as 'avghum' FROM temps";
   $res=mysqli_query($con, $query);
   $data= mysqli_fetch_array($res);
   $field3b= $data["avghum"];
        ?>  <tr>
            <td class="table_cells_odd"> Humidity </td>
            <td class="table_cells_odd"><?php echo "   $field1b" ?></td>
            <td class="table_cells_odd"><?php echo "   $field2b" ?> </td>
            <td class="table_cells_odd"> <?php echo "   $field3b" ?></td>
            </tr>"
   <?php

    $query="SELECT max(lpg) as 'highlpg' FROM temps";
   $res=mysqli_query($con, $query);
   $data= mysqli_fetch_array($res);
   $field1c= $data["highlpg"];
    $query="SELECT min(lpg) as 'lowlpg' FROM temps";
   $res=mysqli_query($con, $query);
   $data= mysqli_fetch_array($res);
   $field2c= $data["lowlpg"];
    $query="SELECT avg(lpg) as 'avglpg' FROM temps";
   $res=mysqli_query($con, $query);
   $data= mysqli_fetch_array($res);
   $field3c= $data["avglpg"];

        ?><tr>
            <td class="table_cells_even"> LPG </td>
            <td class="table_cells_even"><?php echo "   $field1c" ?></td>
            <td class="table_cells_even"><?php echo "   $field2c" ?></td>
            <td class="table_cells_even"><?php echo "   $field3c" ?></td>
            </tr>

   </table>
</center>
<center><a href="livedata.php?page=1" style"color: blue;"> See Live Data Here</a></center>

<div id="header-content"><br><br><br><br> &copyAll rights reserved by  <a href="http://mte.ruet.ac.bd/"
```

```
target="_blank">Dept. of Mechatronics Engineering, RUET</a>
    </div>
</body>
</html>
```

CSS Codes:

```
html {
    background: #e6e9e9;
    background-image: linear-gradient(270deg, rgb(230, 233, 233) 0%, rgb(216, 221, 221) 100%);
    -webkit-font-smoothing: antialiased;
}

body {
    background: #fff;
    box-shadow: 0 0 2px rgba(0, 0, 0, 0.06);
    color: #545454;
    font-family: "Helvetica Neue", Helvetica, Arial, sans-serif;
    font-size: 16px;
    line-height: 1.5;
    margin: 0 auto;
    max-width: 800px;
    padding: 2em 2em 4em;
}

h1, h2, h3, h4, h5, h6 {
    color: #222;
    font-weight: 600;
    line-height: 1.3;
}

h2 {
    margin-top: 1.3em;
}

a {
    color: #0083e8;
}

b, strong {
    font-weight: 600;
}

samp {
    display: none;
}

img {
    animation: colorize 2s cubic-bezier(0, 0, .78, .36) 1;
    background: transparent;
    border: 10px solid rgba(0, 0, 0, 0.12);
    border-radius: 4px;
    display: block;
    margin: 1.3em auto;
```

```
    max-width: 95%;
}

@keyframes colorize {
    0% {
        -webkit-filter: grayscale(100%);
        filter: grayscale(100%);
    }
    100% {
        -webkit-filter: grayscale(0%);
        filter: grayscale(0%);
    }
}
```

Index HTML:

```
<!DOCTYPE html>
<html>

    <head>
        <meta charset="utf-8">
        <meta http-equiv="X-UA-Compatible" content="IE=edge">
        <title>GETTING STARTED WITH BRACKETS</title>
        <meta name="description" content="An interactive getting started guide for Brackets.">
        <link rel="stylesheet" href="main.css">
    </head>

    <body>

        <h1>GETTING STARTED WITH BRACKETS</h1>
        <h2>This is your guide!</h2>

        <!--
            MADE WITH <3 AND JAVASCRIPT
        -->

        <p>
            Welcome to Brackets, a modern open-source code editor that understands web design. It's a lightweight,
            yet powerful, code editor that blends visual tools into the editor so you get the right amount of help
            when you want it.
        </p>

        <!--
            WHAT IS BRACKETS?
        -->
        <p>
            <em>Brackets is a different type of editor.</em>
            Brackets has some unique features like Quick Edit, Live Preview and others that you may not find in other
```

editors. Brackets is written in JavaScript, HTML and CSS. That means that most of you using Brackets

have the skills necessary to modify and extend the editor. In fact, we use Brackets every day to build

Brackets. To learn more about how to use the key features, read on.

<!--

GET STARTED WITH YOUR OWN FILES

-->

<h3>Projects in Brackets</h3>

In order to edit your own code using Brackets, you can just open the folder containing your files.

Brackets treats the currently open folder as a "project"; features like Code Hints, Live Preview and

Quick Edit only use files within the currently open folder.

<samp>

Once you're ready to get out of this sample project and edit your own code, you can use the dropdown

in the left sidebar to switch folders. Right now, the dropdown says "Getting Started" - that's the

folder containing the file you're looking at right now. Click on the dropdown and choose "Open Folder…"

to open your own folder.

You can also use the dropdown later to switch back to folders you've opened previously, including this

sample project.

</samp>

<!--

THE RELATIONSHIP BETWEEN HTML, CSS AND JAVASCRIPT

-->

<h3>Quick Edit for CSS and JavaScript</h3>

No more switching between documents and losing your context. When editing HTML, use the

<kbd>Cmd/Ctrl + E</kbd> shortcut to open a quick inline editor that displays all the related CSS.

Make a tweak to your CSS, hit <kbd>ESC</kbd> and you're back to editing HTML, or just leave the

CSS rules open and they'll become part of your HTML editor. If you hit <kbd>ESC</kbd> outside of

a quick inline editor, they'll all collapse. Quick Edit will also find rules defined in LESS and

SCSS files, including nested rules.

<samp>

Want to see it in action? Place your cursor on the <!-- <samp> --> tag above and press

<kbd>Cmd/Ctrl + E</kbd>. You should see a CSS quick editor appear above, showing the CSS rule that

applies to it. Quick Edit works in class and id attributes as well. You can use it with your

LESS and SCSS files also.

You can create new rules the same way. Click in one of the <!-- <p> --> tags above and press

<kbd>Cmd/Ctrl + E</kbd>. There are no rules for it right now, but you can click the New Rule

button to add a new rule for <!-- <p> -->.

</samp>

You can use the same shortcut to edit other things as well - like functions in JavaScript,

colors, and animation timing functions - and we're adding more and more all the time.

For now inline editors cannot be nested, so you can only use Quick Edit while the cursor

is in a "full size" editor.

<!--

LIVE PREVIEW

-->

<h3>Preview HTML and CSS changes live in the browser</h3>

You know that "save/reload dance" we've been doing for years? The one where you make changes in

your editor, hit save, switch to the browser and then refresh to finally see the result?

With Brackets, you don't have to do that dance.

Brackets will open a live connection to your local browser and push HTML and CSS updates as you

type! You might already be doing something like this today with browser-based tools, but with Brackets

there is no need to copy and paste the final code back into the editor. Your code runs in the

browser, but lives in your editor!

<h3>Live Highlight HTML elements and CSS rules</h3>

Brackets makes it easy to see how your changes in HTML and CSS will affect the page. When your cursor

is on a CSS rule, Brackets will highlight all affected elements in the browser. Similarly, when editing

an HTML file, Brackets will highlight the corresponding HTML elements in the browser.

<samp>

If you have Google Chrome installed, you can try this out yourself. Click on the lightning bolt

icon in the top right corner of your Brackets window or hit <kbd>Cmd/Ctrl + Alt + P</kbd>. When

Live Preview is enabled on an HTML document, all linked CSS documents can be edited in real-time.

The icon will change from gray to gold when Brackets establishes a connection to your browser.

Now, place your cursor on the <!-- <img> --> tag above. Notice the blue highlight that appears

around the image in Chrome. Next, use <kbd>Cmd/Ctrl + E</kbd> to open up the defined CSS rules.

Try changing the size of the border from 10px to 20px or change the background

color from "transparent" to "hotpink". If you have Brackets and your browser running side-by-side, you

will see your changes instantly reflected in your browser. Cool, right?

</samp>

Today, Brackets only supports Live Preview for HTML and CSS. However, in the current version, changes to

JavaScript files are automatically reloaded when you save. We are currently working on Live Preview

support for JavaScript. Live previews are also only possible with Google Chrome, but we hope

to bring this functionality to all major browsers in the future.

<h3>Quick View</h3>

For those of us who haven't yet memorized the color equivalents for HEX or RGB values, Brackets makes

it quick and easy to see exactly what color is being used. In either CSS or HTML, simply hover over any

color value or gradient and Brackets will display a preview of that color/gradient automatically. The

same goes for images: simply hover over the image link in the Brackets editor and it will display a

thumbnail preview of that image.

<samp>

To try out Quick View for yourself, place your cursor on the <!-- <body> --> tag at the top of this

document and press <kbd>Cmd/Ctrl + E</kbd> to open a CSS quick editor. Now simply hover over any of the

color values within the CSS. You can also see it in action on gradients by opening a CSS quick editor

on the <!-- <html> --> tag and hovering over any of the background image values. To try out the image

preview, place your cursor over the screenshot image included earlier in this document.

</samp>

<h3>Need something else? Try an extension!</h3>

In addition to all the goodness that's built into Brackets, our large and growing community of

extension developers has built hundreds of extensions that add useful functionality. If there's

something you need that Brackets doesn't offer, more than likely someone has built an extension for

it. To browse or search the list of available extensions, choose File > Extension

Manager… and click on the "Available" tab. When you find an extension you want, just click

the "Install" button next to it.

<!--

LET US KNOW WHAT YOU THINK

-->

<h2>Get involved</h2>

Brackets is an open-source project. Web developers from around the world are contributing to build

a better code editor. Many more are building extensions that expand the capabilities of Brackets.

Let us know what you think, share your ideas or contribute directly to the project.

</p>

Brackets.io

Brackets Team Blog

Brackets on GitHub

Brackets Extension Registry

Brackets Wiki

Brackets Developer Mailing List

@brackets on Twitter

Chat with Brackets developers on IRC in #brackets on Freenode

</body>

</html>

<!--

[[[[[[[[[[[[[[   ]]]]]]]]]]]]]]

[::::::::::::::   ::::::::::::::]

[::::::::::::::   ::::::::::::::]

[::::::[[[[[[[:   :]]]]]]]::::::]

[:::::[   ]:::::]

[:::::[   ]:::::]

[:::::[   ]:::::]

[:::::[   ]:::::]

[:::::[CODE THE WEB   ]:::::]

[:::::[http://brackets.io]:::::]

[:::::[   ]:::::]

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[:::::[   ]:::::]

[::::::[[[[[[[:   :]]]]]]]::::::]

[::::::::::::::   ::::::::::::::]

[::::::::::::::   ::::::::::::::]

[[[[[[[[[[[[[[   ]]]]]]]]]]]]]]

-->

Arduino Code:

For Fetching data into server:

```
#include <ESP8266HTTPClient.h>
#include <ESP8266WiFi.h>
#include <dht.h>
#define LED D4
#define MQ_PIN A0
// Setting up variables
int delay_time  = 3000; // Its mean 3 seconds wait to enter first record
float get_lpg;

//Access point credentials
const char* ssid        = "Asif";
const char* pwd         = "18273645";
String get_status_url   = "http://192.168.43.207/device_controll/get_status.php";
String add_data_url     = "http://192.168.43.207/device_controll/add_data.php";
String light_data_url   = "http://192.168.43.207/main/get_state.php";
WiFiServer server(80);  // open port 80 for server connection

void setup()
{
  Serial.begin(115200); //initialise the serial communication
  delay(20);
  WiFi.begin(ssid, pwd);

    //starting the server
    server.begin();

}
void handleLED() {
  String LEDState = "OFF";
   String t_state = get_device_status("light_sensor");
   Serial.println(t_state);
 if(t_state == "1")
 {
  digitalWrite(LED,HIGH); //LED ON
  LEDState = "ON"; //Feedback parameter
 }
 else
 {
  digitalWrite(LED,LOW); //LED OFF
  LEDState = "OFF"; //Feedback parameter
 }}

void loop(){

    String device_status  = get_device_status("home_sensor");
    delay(2000);
    WiFiClient client = server.available();
```

```
    DHT.read11(dht_apin);
    get_temperature =   DHT.temperature;
    get_humidity    =   DHT.humidity;
  float sensor_volt; //Define variable for sensor voltage
  float RS_gas; //Define variable for sensor resistance
  float ratio; //Define variable for ratio
  float sensorValue = analogRead(MQ_PIN); //Read analog values of sensor
  float m = -0.423; //Slope
  float b = 1.276; //Y-Intercept
  float R0 = 5.62; //Sensor Resistance in fresh air from previous code


  sensor_volt = sensorValue*(5.0/1023.0); //Convert analog values to voltage
  RS_gas = ((5.0*10.0)/sensor_volt)-10.0; //Get value of RS in a gas
  ratio = RS_gas/R0;  // Get ratio RS_gas/RS_air


  double ppm_log = (log10(ratio)-b)/m; //Get ppm value in linear scale according to the the ratio value
  double ppm = pow(10, ppm_log); //Convert ppm value to log scale
  double percentage = ppm/10000; //Convert to percentage


  double get_lpg = ppm;
    if(device_status=="1")
    {
     add_device_data(get_temperature, get_humidity, get_lpg); //add sensor
    }
    else
    {
     Serial.println("Device Status is going OFF");
     }


    delay(delay_time);



}



///This is the function that will get status of device that is On or Off
void add_device_data(float get_temperature, float get_humidity,float get_lpg) // add sensor
  {


      WiFiClient client = server.available();


      HTTPClient http;
      String url = add_data_url+"?temp="+get_temperature+"
```

```
&humidity="+get_humidity+"&lpg="+get_lpg; //add sensors
      http.begin(url);
      //GET method
      int httpCode = http.GET();
      String payload = http.getString();
      Serial.println(url);
      Serial.println(payload);
      http.end();


 }


String get_device_status(String device_name)
 {

      WiFiClient client = server.available();


      HTTPClient http;
      String url = get_status_url+"?device_name="+device_name;
      http.begin(url);
      int httpCode = http.GET();
      String payload = http.getString();
      Serial.println(url);
      Serial.println(payload);
      return payload;
 }
```

For controlling Actuator:

```
#include <ESP8266WiFi.h>
#include <WiFiClient.h>
#include <ESP8266WebServer.h>

#include "Asif.h" //Our HTML webpage contents with javascripts
#define MQ A0
int relay_1;
int relay_2;

#define LED D4  //On board LED
//SSID and Password of your WiFi router
const char* ssid = "Asif";
const char* password = "18273645";

ESP8266WebServer server(80); //Server on port 80

void handleRoot() {
 String s = MAIN_page; //Read HTML contents
 server.send(200, "text/html", s); //Send web page
}
```

```
void handleADC() {
  float MQ = analogRead(A0);
  String ADCValue = String(MQ);



 server.send(200, "text/plane", ADCValue);
//Send ADC value only to client ajax request
}


void handleLED() {
 String LEDState = "OFF";
 String t_state = server.arg("LEDstate");
//Refer  xhttp.open("GET",
"setLED?LEDstate="+led, true);
 Serial.println(t_state);
 if(t_state == "1")
 {
  digitalWrite(LED,LOW); //LED ON
  LEDState = "ON"; //Feedback parameter
 }
 else
 {
  digitalWrite(LED,HIGH); //LED OFF
  LEDState = "OFF"; //Feedback parameter
 }


 server.send(200, "text/plane", LEDState);
//Send web page
}
```

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


  WiFi.begin(ssid, password);     //Connect to
your WiFi router
  Serial.println("");


  //Onboard LED port Direction output
  pinMode(LED,OUTPUT);
  //pinMode(trigPin, OUTPUT);
  //pinMode(echoPin, INPUT);
  // Wait for connection
  while (WiFi.status() !=
WL_CONNECTED) {
    delay(500);
    Serial.print(".");
  }


  //If connection successful show IP address
in serial monitor
  Serial.println("");
  Serial.print("Connected to ");
  Serial.println(ssid);
  Serial.print("IP address: ");
  Serial.println(WiFi.localIP());  //IP address
assigned to your ESP


  server.on("/", handleRoot);      //Which
routine to handle at root location. This is
display page
```

```
  server.on("/setLED", handleLED);
  server.on("/readADC", handleADC);

  server.begin();                 //Start server
  Serial.println("HTTP server started");
}

void loop(void){
  server.handleClient();          //Handle client
requests
}
```