```
#include <ESP8266WiFi.h>
const char* ssid = "WiFi Name (SSID)";
const char* password = "WiFi Password";
int LED = 16; // led connected to D0
WiFiServer server(80);
void setup()
{
 Serial.begin(115200);
 pinMode(LED, OUTPUT);
 digitalWrite(LED, LOW);
 Serial.print("Connecting to the Newtork");
 WiFi.begin(ssid, password);
 while (WiFi.status() != WL_CONNECTED)
 {
 delay(500);
 Serial.print(".");
 }
 Serial.println("WiFi connected");
 server.begin(); // Starts the Server
 Serial.println("Server started");
 Serial.print("IP Address of network: "); // Prints IP address on Serial Monitor
 Serial.println(WiFi.localIP());
 Serial.print("Copy and paste the following URL: https://");
 Serial.print(WiFi.localIP());
 Serial.println("/");
}
void loop()
```

```
{
WiFiClient client = server.available();
 if (!client)
 {
 return;
 }
 Serial.println("Waiting for new client");
 while(!client.available())
 {
 delay(1);
 }
 String request = client.readStringUntil('\r');
 Serial.println(request);
 client.flush();
 int value = LOW;
 if(request.indexOf("/LED=ON") != -1)
 {
 digitalWrite(LED, HIGH); // Turn ON LED
 value = HIGH;
 }
 if(request.indexOf("/LED=OFF") != -1)
 {
 digitalWrite(LED, LOW); // Turn OFF LED
 value = LOW;
 }
/*------------------HTML Page Creation---------------------*/
client.println("HTTP/1.1 200 OK"); // standalone web server with an ESP8266
```

```
client.println("Content-Type: text/html");
client.println("");
client.println("<!DOCTYPE HTML>");
client.println("<html>");
client.print("LED: ");
if(value == HIGH)
{
client.print("ON");
}
else
{
client.print("OFF");
}
client.println("<br><br>");
client.println("<a href=\"/LED=ON\"\"><button>ON</button></a>");
client.println("<a href=\"/LED=OFF\"\"><button>OFF</button></a><br />");
client.println("</html>");
delay(1);
Serial.println("Client disonnected");
Serial.println("");
}
```