

```

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

const char* ssid = "4Bots";
const char* password = "pra@12345";

#define IN_1 D3 // L298N in1 motors Right GPIO0 (D3)
#define IN_2 D4 // L298N in2 motors Right GPIO2 (D4)
#define IN_3 D6 // L298N in3 motors Left GPIO12 (D6)
#define IN_4 D7 // L298N in4 motors Left GPIO13 (D7)

String command;
int v = 150;
int vl = 40;

ESP8266WebServer server(80);

void setup() {

    Serial.begin(115200);

    pinMode(IN_1, OUTPUT);
    pinMode(IN_2, OUTPUT);
    pinMode(IN_3, OUTPUT);
    pinMode(IN_4, OUTPUT);

    WiFi.mode(WIFI_AP);
    WiFi.softAP(ssid, password);

    IPAddress myIP = WiFi.softAPIP();
    Serial.print("AP IP address: ");
    Serial.println(myIP);

    // Starting WEB-server

```

```
server.on ( "/", HTTP_handleRoot );
server.onNotFound ( HTTP_handleRoot );
server.begin();
}
```

```
void loop() {
  server.handleClient();

  command = server.arg("State");
  if (command == "F") goForward();
  else if (command == "B") goBack();
  else if (command == "L") goLeft();
  else if (command == "R") goRight();
  else if (command == "I") goForwardRight();
  else if (command == "G") goForwardLeft();
  else if (command == "J") goBackRight();
  else if (command == "H") goBackLeft();
  else if (command == "0") v = 100;
  else if (command == "1") v = 120;
  else if (command == "2") v = 140;
  else if (command == "3") v = 160;
  else if (command == "4") v = 180;
  else if (command == "5") v = 200;
  else if (command == "6") v = 215;
  else if (command == "7") v = 230;
  else if (command == "8") v = 240;
  else if (command == "9") v = 255;
  else if (command == "S") stop();
}
```

```
void HTTP_handleRoot(void) {

  if( server.hasArg("State") ){
    Serial.println(server.arg("State"));
  }
  server.send ( 200, "text/html", "" );
}
```

```
    delay(1);  
}  
  
void goForward() {  
  
    analogWrite(IN_1, v-2);  
    analogWrite(IN_2, 0);  
  
    analogWrite(IN_3, v);  
    analogWrite(IN_4, 0);  
  
}
```

```
void goBack() {  
  
    analogWrite(IN_1, 0);  
    analogWrite(IN_2, v);  
  
    analogWrite(IN_3, 0);  
    analogWrite(IN_4, v);  
  
}
```

```
void goRight() {  
  
    analogWrite(IN_1, 0);  
    analogWrite(IN_2, v);  
  
    analogWrite(IN_3, v);  
    analogWrite(IN_4, 0);  
  
}
```

```
void goLeft() {  
  
    analogWrite(IN_1, v);  
    analogWrite(IN_2, 0);  
  
}
```

```
        analogWrite(IN_3, 0);  
        analogWrite(IN_4, v);  
    }
```

```
void goForwardLeft() {  
  
    analogWrite(IN_1, v);  
    analogWrite(IN_2, 0);  
  
    analogWrite(IN_3, v-v1);  
    analogWrite(IN_4, 0);  
}
```

```
void goForwardRight() {  
  
    analogWrite(IN_1, v-v1);  
    analogWrite(IN_2, 0);  
  
    analogWrite(IN_3, v);  
    analogWrite(IN_4, 0);  
}
```

```
void goBackLeft() {  
  
    analogWrite(IN_1, 0);  
    analogWrite(IN_2, v);  
  
    analogWrite(IN_3, 0);  
    analogWrite(IN_4, v-v1);  
}
```

```
void goBackRight() {  
  
    analogWrite(IN_1, 0);  
    analogWrite(IN_2, v-v1);  
}
```

```
    analogWrite(IN_3, 0);  
    analogWrite(IN_4, v);  
}
```

```
void stop() {  
  
    analogWrite(IN_1, 0);  
    analogWrite(IN_2, 0);  
  
    analogWrite(IN_3, 0);  
    analogWrite(IN_4, 0);  
}
```