#define SolMotorileri 7

#define SolMotorGeri 10

#define SagMotorileri 13

#define SagMotorGeri 12

#define yesil\_led 8

#define mavi\_led 9

#define sensorOut 3

#define S2 4

#define S3 2

int hiz = 120;

int yogunluk = 0; // sıklık

int ortalama = 50; // ortalama

int kirmizi, yesil, mavi;

#define vcc\_a 11

#define vcc\_b 5

#define vcc\_m 6

int a = 0;

unsigned long next\_time = 0;

void setup() {

pinMode(vcc\_a , OUTPUT);

pinMode(vcc\_b , OUTPUT);

pinMode(vcc\_m , OUTPUT);

pinMode(SolMotorileri, OUTPUT);

pinMode(SolMotorGeri, OUTPUT);

pinMode(SagMotorileri, OUTPUT);

pinMode(SagMotorGeri, OUTPUT);

pinMode(yesil\_led, OUTPUT);

pinMode(mavi\_led, OUTPUT);

pinMode(sensorOut, INPUT);

pinMode (S2, OUTPUT);

pinMode (S3, OUTPUT);

digitalWrite(vcc\_m , HIGH);

Serial.begin(9600);

for (int a = 0; a < 10; a++)

{

digitalWrite(yesil\_led, HIGH);

digitalWrite(mavi\_led, LOW);

delay (100);

digitalWrite(mavi\_led, HIGH);

digitalWrite(yesil\_led, LOW);

delay (100);

}

digitalWrite(mavi\_led, LOW);

digitalWrite(yesil\_led, LOW);

}

void loop() {

int sol\_sensor = analogRead(A1);

int sag\_sensor = analogRead(A0);

analogWrite(vcc\_a, hiz); //0 ie 255

analogWrite(vcc\_b, hiz); //0 ie 255

if (sol\_sensor < 500 && sag\_sensor < 500 ) {

digitalWrite(SolMotorileri, LOW);

digitalWrite(SolMotorGeri, LOW);

digitalWrite(SagMotorileri, LOW);

digitalWrite(SagMotorGeri, LOW);

digitalWrite(mavi\_led, HIGH);

digitalWrite(yesil\_led, HIGH);

delay(50);

digitalWrite(mavi\_led, LOW);

digitalWrite(yesil\_led, LOW);

renk();

digitalWrite(SolMotorileri, HIGH);

digitalWrite(SolMotorGeri, LOW);

digitalWrite(SagMotorileri, HIGH);

digitalWrite(SagMotorGeri, LOW);

delay(200);

}

if (sol\_sensor > 500 && sag\_sensor > 500 ) {

digitalWrite(SolMotorileri, HIGH);

digitalWrite(SolMotorGeri, LOW);

digitalWrite(SagMotorileri, HIGH);

digitalWrite(SagMotorGeri, LOW);

}

if (sol\_sensor > 500 && sag\_sensor < 500 ) {

digitalWrite(SolMotorileri, LOW);

digitalWrite(SolMotorGeri, HIGH);

digitalWrite(SagMotorileri, HIGH);

digitalWrite(SagMotorGeri, LOW);

delay(100);

}

if (sol\_sensor < 500 && sag\_sensor > 500 ) {

digitalWrite(SolMotorileri, HIGH);

digitalWrite(SolMotorGeri, LOW);

digitalWrite(SagMotorileri, LOW);

digitalWrite(SagMotorGeri, HIGH);

delay(100);

}

}

void renk()

{

digitalWrite(S2, HIGH);

digitalWrite(S3, HIGH);

yogunluk = pulseIn(sensorOut, LOW);

yesil = yogunluk;

delay(50);

digitalWrite(S2, LOW);

digitalWrite(S3, HIGH);

yogunluk = pulseIn(sensorOut, LOW);

mavi = yogunluk;

delay(50);

if( mavi < yesil)

{

hiz=150;

digitalWrite(yesil\_led, LOW);

digitalWrite(mavi\_led, HIGH);

}

else if( yesil < mavi )

{

hiz=255;

digitalWrite(yesil\_led, HIGH);

digitalWrite(mavi\_led, LOW);

}

Serial.print("kirmizi = "); Serial.print(kirmizi );

Serial.print(" mavi = "); Serial.print(mavi);

Serial.print(" yesil = "); Serial.print(yesil);

Serial.print(" hiz = "); Serial.println(hiz);

}