

```

#include <Servo.h>

Servo solkol;
Servo sagkol;
Servo kollar;
Servo dampersol;
Servo
dampersag;

int MZ80ust = 2;
int MZ80alt = 3;
int sensorarka = 4;

int MotorA1 = 10;  //sol
motor
int MotorA2 = 11;
int MotorB1 = 12;  //sag motor
int MotorB2 = 13;

int i = 0;
int j =
0;
int k = 500;
int b = 200;
int a = 0;
int c = 0;
int u = 0;
int num = 4;
int time = 0;
int
beyaz = 100;
int cop= 0 ;
int kol = 100;
int solk= 90;
int sagk = 10;
void
setup(){

solkol.attach(5);
sagkol.attach(6);
kollar.attach(7);
dampersol.attach(8);
dampersag.
attach(9);

pinMode( MotorA1,OUTPUT );
pinMode( MotorA2,OUTPUT );
pinMode( MotorB1,OUTPUT
);
pinMode( MotorB2,OUTPUT );

pinMode( MZ80alt,INPUT );
pinMode( MZ80ust,INPUT );
pinMode(
sensorarka,INPUT );

Serial.begin(9600);

}

void loop(){

    dampersol.write(160);

    dampersag.write(0);
    solkol.write(solk);
    sagkol.write(sagk);

    kollar.write(kol);

digitalWrite(MotorA1,
LOW);

```

```

digitalWrite(MotorA2, LOW);
digitalWrite(MotorB1, LOW);
digitalWrite(MotorB2,
LOW);
delay(1000);

while(1){

////
int onsol    = analogRead(A0);
int onsag    =
analogRead(A1);
int arkasol = analogRead(A2);
//int arkasag = analogRead(A3);

Serial.print(onsol);
    Serial.print("\t");
    Serial.print(onsag);

Serial.print("\t");
    Serial.print(arkasol);
    Serial.print("\t");

//Serial.println(arkasag);
//

int MZalt =    digitalRead(MZ80alt);
int MZust =
digitalRead(MZ80ust);
int sensarka = digitalRead(sensorarka);

    if(MZalt == LOW){

delay(70);
MZalt =    digitalRead(MZ80alt);
MZust =    digitalRead(MZ80ust);
sensarka =
digitalRead(sensorarka);

        if(MZust == HIGH){
            digitalWrite(MotorA1,
LOW);
digitalWrite(MotorA2, LOW);
digitalWrite(MotorB1, LOW);
digitalWrite(MotorB2, LOW);

                                //Çöp Toplama fonksiyonu

            solk =
90;
            sagk = 10;
            kol  = 97;
            kollar.write(kol);    //yukar?da
            delay
(500);
            solkol.write(solk);    //ac?k
            sagkol.write(sagk);    //ac?k

            delay(1000);

            for(i=0;i<16;i++){
                kollar.write(kol);
                kol = kol
- 5;
                delay(50);
            } //asag?da
                delay (500);
                for(i=0;i<16;i++){ // kollar
kapal?
                    solkol.write(solk);

```

```

        sagkol.write(sagk);
    solk =
    solk - 5;
    sagk = sagk + 5;
    delay(50);
}
    delay(500);
    kol=110;
    kollar.write(kol);
    //yukar?da
    delay (1000);

    cop++;

    MZalt =    digitalRead(MZ80alt);
    MZust =
        digitalRead(MZ80ust);
    sensarka = digitalRead(sensarka);

    if(MZalt == LOW){

        if(MZust
        == HIGH){
            // geri git
            digitalWrite(MotorA1, LOW);
            digitalWrite(MotorA2, HIGH);

digitalWrite(MotorB1, LOW);
            digitalWrite(MotorB2, HIGH);
            delay(1000);

digitalWrite(MotorA1, LOW);
            digitalWrite(MotorA2, LOW);
            digitalWrite(MotorB1, LOW);

digitalWrite(MotorB2, LOW);

            solk = 90;
            sagk = 10;
            kol  = 100;

            kollar.write(kol);    //yukar?da
            delay (500);
            solkol.write(solk);    //ac?k

            sagkol.write(sagk);    //ac?k
            delay(1000);

for(i=0;i<16;i++){
    kollar.write(kol);
    kol = kol - 5;
    delay(50);
}    //asag?da

    delay (500);
        for(i=0;i<16;i++){ // kollar  kapal?
            solkol.write(solk);

            sagkol.write(sagk);
            solk = solk - 5;
            sagk = sagk + 5;
            delay(50);

        }

        kol=110;
        kollar.write(kol);    //yukar?da
        delay (1000);

    }
}
}
}

```

//cop toplama fonksiyonu son

```
if(MZust == LOW){

u = 1;
}
while(u == 1){

                                                                    // DAMPERR

    if(cop > num){
digitalWrite(MotorA1,
LOW);
digitalWrite(MotorA2, LOW);
digitalWrite(MotorB1, LOW);
digitalWrite(MotorB2, LOW);
        j
    = 1;
        while(j < 1000){
            // saga donus
digitalWrite(MotorA1,
HIGH);
digitalWrite(MotorA2, LOW);
digitalWrite(MotorB1, LOW);
digitalWrite(MotorB2, HIGH);

sensarka = digitalRead(sensorarka);
    if ( sensarka == LOW){
digitalWrite(MotorA1,
LOW);
digitalWrite(MotorA2, LOW);
digitalWrite(MotorB1, LOW);
digitalWrite(MotorB2,
LOW);
delay(100);
        kollar.write(80);
        delay(500);
        dampersol.write(160);

dampersag.write(0);
delay(100);
        dampersol.write(60);

dampersag.write(100);
delay(1000);
        dampersol.write(110);
        dampersag.write(50);

delay(1000);
        dampersol.write(60);
        dampersag.write(100);
delay(1000);

dampersol.write(160);
        dampersag.write(0);
        delay(500);

kollar.write(110);
delay(100);
cop = 0;
num = 0;
j= 1000;
    }else{
        delay(4);

        j++;
    }

}
}
u =0;
```

```
}  
}
```

//Çöp Atma Fonksiyon

```
sensarka = digitalRead(sensorarka);  
if ( sensarka ==  
LOW){  
digitalWrite(MotorA1, LOW);  
digitalWrite(MotorA2, LOW);  
digitalWrite(MotorB1,  
LOW);  
digitalWrite(MotorB2, LOW);  
delay(100);  
kollar.write(80);  
delay(500);  
  
dampersol.write(160);  
dampersag.write(0);  
delay(100);  
dampersol.write(60);  
  
dampersag.write(100);  
delay(1000);  
dampersol.write(110);  
dampersag.write(50);  
  
delay(1000);  
dampersol.write(60);  
dampersag.write(100);  
delay(1000);  
  
dampersol.write(160);  
dampersag.write(0);  
delay(500);  
  
kollar.write(110);  
delay(100);  
cop = 0;  
num = 0;  
  
}
```

//Çizgi

sensorleri

```
if(onsol < beyaz){  
    // geri gidi?  
digitalWrite(MotorA1,  
LOW);  
digitalWrite(MotorA2, HIGH);  
digitalWrite(MotorB1, LOW);  
digitalWrite(MotorB2,  
HIGH);  
delay (1000);  
delay (1000);  
    // saga donus  
digitalWrite(MotorA1,  
HIGH);  
digitalWrite(MotorA2, LOW);  
digitalWrite(MotorB1, LOW);  
digitalWrite(MotorB2,  
HIGH);  
delay (1000);  
delay (500);  
  
}else if(onsag < 300){  
    // geri  
gidi?  
digitalWrite(MotorA1, LOW);  
digitalWrite(MotorA2, HIGH);  
digitalWrite(MotorB1,
```

```

LOW);
digitalWrite(MotorB2, HIGH);
delay (1000);
delay (1000);

        //sola

donus
digitalWrite(MotorA1, LOW);
digitalWrite(MotorA2, HIGH);
digitalWrite(MotorB1,
HIGH);
digitalWrite(MotorB2, LOW);
delay (1000);
delay (500);

}
if(arkasol < beyaz){

        // ileri gidi?
digitalWrite(MotorA1, HIGH);
digitalWrite(MotorA2,
LOW);
digitalWrite(MotorB1, HIGH);
digitalWrite(MotorB2, LOW);
delay (1000);
}
//if(arkasag
< beyaz){
//        // ileri gidi?
//digitalWrite(MotorA1, HIGH);
//digitalWrite(MotorA2,
LOW);
//digitalWrite(MotorB1, HIGH);
//digitalWrite(MotorB2, LOW);
//delay (1000);
//}

        // ARAMA
if(c == 100){
k = 500;
a = 0;
b = 200;
c = 0;
}

if(a < 200){

// ileri gidi?
digitalWrite(MotorA1, HIGH);
digitalWrite(MotorA2, LOW);
digitalWrite(MotorB1,
HIGH);
digitalWrite(MotorB2, LOW);

delay(time);
a++;

MZust =
digitalRead(MZ80ust);
if(MZust == LOW){
        //sola donus
digitalWrite(MotorA1,
LOW);
digitalWrite(MotorA2, HIGH);
digitalWrite(MotorB1, HIGH);
digitalWrite(MotorB2,
LOW);
delay(300);
}
}

if(a == 200 && k < 600){
        // saga
donus

```

```

digitalWrite(MotorA1, HIGH);
digitalWrite(MotorA2, LOW);
digitalWrite(MotorB1,
LOW);
digitalWrite(MotorB2, HIGH);

delay(time);
k++;

}

if(a == 200 && k == 600
&& b > 0){

        //sola donus
digitalWrite(MotorA1,
LOW);
digitalWrite(MotorA2, HIGH);
digitalWrite(MotorB1, HIGH);
digitalWrite(MotorB2,
LOW);

delay(time);
b--;
}

if(a == 200 && k == 600 && b == 0 && c
< 100 ){

        // saga donus
digitalWrite(MotorA1, HIGH);
digitalWrite(MotorA2,
LOW);
digitalWrite(MotorB1, LOW);
digitalWrite(MotorB2,
HIGH);

delay(time);
c++;
}

}
}

```