#include <Servo.h>

//define Pin numbers

int trigPin = 9;

int echoPin = 8;

//Create servo object to control a servo

Servo S7;

Servo S6;

Servo S10;

Servo S13;

Servo S14;

Servo S15;

void setup()

{

pinMode(trigPin, OUTPUT);

pinMode(echoPin, INPUT);

S7.attach(7);

S6.attach(6);

S10.attach(10);

S13.attach(13);

S14.attach(A0);

S15.attach(A1);

S6.write(0);

S7.write(0);

S10.write(0);

S13.write(0);

S14.write(0);

S15.write(0);

}

void loop()

{

if(calc\_dis() <= 10){//motion#1

S6.write(90);

S7.write(90);

S10.write(90);

S13.write(90);

S14.write(90);

S15.write(90);

delay(1000);

}

else if(calc\_dis() <=50){//motion#2

S6.write(180);

S7.write(180);

S10.write(180);

S13.write(180);

S14.write(180);

S15.write(180);

delay(1000);

}

else if(calc\_dis() <= 100){//motion#3

S6.write(0);

S7.write(0);

S10.write(0);

S13.write(0);

S14.write(0);

S15.write(0);

delay(1000);

}

}

//functions

int calc\_dis(){

int duration, distance;

digitalWrite(trigPin, LOW);

delayMicroseconds(2);

digitalWrite(trigPin, HIGH);

delayMicroseconds(10);

digitalWrite(trigPin, LOW);

duration = pulseIn(echoPin, HIGH);

distance= duration\*0.034/2;

return distance;

}