//Define all the input pins of the motor driver

const int motor1input1=2;

const int motor1input2=3;

const int motor2input1=4;

const int motor2input2=5;

# define relay 7

#include<Servo.h>

Servo Myservo1;

Servo Myservo;

int pos;

char t;

void setup() {

pinMode(relay, OUTPUT);

pinMode(6, OUTPUT);

pinMode(11,OUTPUT);

pinMode(A0, OUTPUT);

pinMode(A1,OUTPUT);

analogWrite(6, 50);

analogWrite(11, 50);

Serial.begin(9600);

//Set baud rate for serial communication

//Set all the pin as OUTPUT

pinMode(motor1input1,OUTPUT);

pinMode(motor1input2,OUTPUT);

pinMode(motor2input1,OUTPUT);

pinMode(motor2input2,OUTPUT);

//Set all the pin to Logic HIGH to initially turn off the motor

Myservo1.attach(8);

Myservo.attach(13);

digitalWrite(relay, HIGH);

}

void loop()

{

if(Serial.available())

{

t = Serial.read();

Serial.print(t);

}

if(t == 'P'){pest();}

if(t == 'D'){seed();}

if(t == 'Z'){stop2();}

if(t == 'F'){forward();}

if(t == 'B'){backward();}

if(t == 'L'){left();}

if(t == 'R'){right();}

if(t == 'S'){stop1();}

if(t == 'C'){relay1();}

}

void relay1()

{

digitalWrite(relay, LOW);

}

void stop1()

{ digitalWrite(motor1input1,HIGH);

digitalWrite(motor1input2,HIGH);

digitalWrite(motor2input1,HIGH);

digitalWrite(motor2input2,HIGH);}

void forward(){

digitalWrite(2,HIGH);

digitalWrite(4,LOW);

digitalWrite(3,LOW);

digitalWrite(5,HIGH);

Serial.println("In Forward");

}

void backward(){

digitalWrite(motor1input1,LOW);

digitalWrite(motor2input1,HIGH);

digitalWrite(motor1input2,HIGH);

digitalWrite(motor2input2,LOW);}

void left(){

digitalWrite(motor1input1,LOW);

digitalWrite(motor2input1,HIGH);

digitalWrite(motor1input2,LOW);

digitalWrite(motor2input2,LOW);}

void right()

{ digitalWrite(motor1input1,HIGH);

digitalWrite(motor2input1,LOW);

digitalWrite(motor1input2,LOW);

digitalWrite(motor2input2,LOW); }

void seed()

{

for(pos=30;pos<=90;pos++){

Myservo1.write(pos);

delay(15);

}

delay(500);

for(pos=90;pos>=30;pos--){

Myservo1.write(pos);

delay(15);

}

}

void pest()

{

digitalWrite(A1, HIGH);

digitalWrite(A0, LOW);

for(pos=80;pos<=160;pos++){

Myservo.write(pos);

delay(15);

}

delay(1000);

for(pos=160;pos>=80;pos--){

Myservo.write(pos);

delay(15);

}}

void stop2()

{

Myservo1.write(30);

Myservo.write(80);

digitalWrite(relay, HIGH);

digitalWrite(A1, LOW);

digitalWrite(A0, LOW);

}