#include <Servo.h>

Servo s1;

Servo s2;

int pot1 = 1;

int pot2 = 3;

int val1 = 0;

int val2 = 0;

void setup() {

 s1.attach(12);

 s2.attach(13);

 Serial.begin(9600);

}

void loop() {

 val1 = analogRead(pot1);

 val2 = analogRead(pot2);

 while((val1 >= 400 && val1 <= 700) && (val2 >= 475 && val2 <= 775))

 {

 //stop

 s1.writeMicroseconds(1500);

 s2.writeMicroseconds(1500);

 }

 while((val1 < 400) && (val2 >= 475 && val2 <= 775))

 {

 //full forward

 s1.writeMicroseconds(1000);

 s2.writeMicroseconds(20000);

 }

 while((val1 > 700) && (val2 >= 475 && val2 <= 775))

 {

 //full reverse

 s1.writeMicroseconds(1000);

 s2.writeMicroseconds(2000);

 }

 while((val1 >= 400 && val1 <= 700) && (val2 > 775))

 {

 //turn left

 s1.writeMicroseconds(1000);

 s2.writeMicroseconds(1000);

 }

 while((val1 >= 400 && val1 <= 700) && (val2 > 775))

 {

 //turn right

 s1.writeMicroseconds(2000);

 s2.writeMicroseconds(2000);

 }

 Serial.println(String(val1) + "-" + String(val2));

}