#!/usr/bin/python

# -\*- coding:utf-8 -\*-

import RPi.GPIO as GPIO

import time

import sys

PIN = 4

PWMA=18

PWMB=23

AIN1=22

AIN2=27

BIN1=25

BIN2=24

GPIO.setmode(GPIO.BCM)

GPIO.setwarnings(False)

GPIO.setup(AIN1,GPIO.OUT)

GPIO.setup(BIN1,GPIO.OUT)

GPIO.setup(AIN2,GPIO.OUT)

GPIO.setup(BIN2,GPIO.OUT)

GPIO.setup(PWMA,GPIO.OUT)

GPIO.setup(PWMB,GPIO.OUT)

GPIO.setup(PIN,GPIO.IN,GPIO.PUD\_UP)

try:

while True:

#lirc control

if GPIO.input(PIN) == 0:

count = 0

while GPIO.input(PIN) == 0 and count < 200:

count += 1

time.sleep(0.00006)

count = 0

while GPIO.input(PIN) == 1 and count < 80:

count += 1

time.sleep(0.00006)

idx = 0

cnt = 0

data = [0,0,0,0]

for i in range(0,32):

count = 0

while GPIO.input(PIN) == 0 and count < 15:

count += 1

time.sleep(0.00006)

count = 0

while GPIO.input(PIN) == 1 and count < 40:

count += 1

time.sleep(0.00006)

if count > 8:

data[idx] |= 1<<cnt

if cnt == 7:

cnt = 0

idx += 1

else:

cnt += 1

if data[0]+data[1] == 0xFF and data[2]+data[3] == 0xFF:

#print("Get the key: 0x%02x" %data[2])

key\_val=data[2]

GPIO.output(AIN1,0)

GPIO.output(AIN2,0)

GPIO.output(BIN1,0)

GPIO.output(BIN2,0)

if(key\_val==0x46):

print("up")

GPIO.output(AIN1,1)

GPIO.output(AIN2,0)

GPIO.output(BIN1,1)

GPIO.output(BIN2,0)

x=GPIO.PWM(PWMA,100)

y=GPIO.PWM(PWMB,100)

x.start(30)

y.start(30)

time.sleep(0.05)

elif(key\_val==0x15):

print("down")

GPIO.output(AIN1,0)

GPIO.output(AIN2,1)

GPIO.output(BIN1,0)

GPIO.output(BIN2,1)

x=GPIO.PWM(PWMA,100)

y=GPIO.PWM(PWMB,100)

x.start(30)

y.start(30)

time.sleep(0.05)

elif(key\_val==0x44):

print("left ")

GPIO.output(AIN1,1)

GPIO.output(AIN2,0)

GPIO.output(BIN1,1)

GPIO.output(BIN2,0)

x=GPIO.PWM(PWMA,100)

y=GPIO.PWM(PWMB,100)

x.start(0)

y.start(30)

time.sleep(0.05)

elif(key\_val==0x43):

print("right")

GPIO.output(AIN1,1)

GPIO.output(AIN2,0)

GPIO.output(BIN1,1)

GPIO.output(BIN2,0)

x=GPIO.PWM(PWMA,100)

y=GPIO.PWM(PWMB,100)

x.start(30)

y.start(0)

time.sleep(0.05)

elif(key\_val==0x45):

print("left up")

GPIO.output(AIN1,1)

GPIO.output(AIN2,0)

GPIO.output(BIN1,1)

GPIO.output(BIN2,0)

x=GPIO.PWM(PWMA,100)

y=GPIO.PWM(PWMB,100)

x.start(20)

y.start(30)

time.sleep(0.05)

elif(key\_val==0x47):

print("right up")

GPIO.output(AIN1,1)

GPIO.output(AIN2,0)

GPIO.output(BIN1,1)

GPIO.output(BIN2,0)

x=GPIO.PWM(PWMA,100)

y=GPIO.PWM(PWMB,100)

x.start(30)

y.start(20)

time.sleep(0.05)

elif(key\_val==0x07):

print("left down")

GPIO.output(AIN1,0)

GPIO.output(AIN2,1)

GPIO.output(BIN1,0)

GPIO.output(BIN2,1)

x=GPIO.PWM(PWMA,100)

y=GPIO.PWM(PWMB,100)

x.start(20)

y.start(30)

time.sleep(0.05)

elif(key\_val==0x09):

print("right down")

GPIO.output(AIN1,0)

GPIO.output(AIN2,1)

GPIO.output(BIN1,0)

GPIO.output(BIN2,1)

x=GPIO.PWM(PWMA,100)

y=GPIO.PWM(PWMB,100)

x.start(30)

y.start(20)

time.sleep(0.05)

elif(key\_val==0x40):

print("stop")

GPIO.output(AIN1,0)

GPIO.output(AIN2,0)

GPIO.output(BIN1,0)

GPIO.output(BIN2,0)

except KeyboardInterrupt:

print('error')

GPIO.cleanup();