import RPi.GPIO as GPIO

import time

IN1A=14 #output pins for motor 1

IN1B=15

IN2A=23 #output pins for motor 2

IN2B=24

IN3A=5 #output pins for motor 3

IN3B=6

IN4A=2 #output pins for motor 4

IN4B=3

GPIO.setmode(GPIO.BCM)

GPIO.setup(IN1A,GPIO.OUT) #setting all pins as output

GPIO.setup(IN1B,GPIO.OUT)

GPIO.setup(IN2A,GPIO.OUT)

GPIO.setup(IN2B,GPIO.OUT)

GPIO.setup(IN3A,GPIO.OUT)

GPIO.setup(IN3B,GPIO.OUT)

GPIO.setup(IN4A,GPIO.OUT)

GPIO.setup(IN4B,GPIO.OUT)

def fwd():#function for forward movement

GPIO.output(IN1A,GPIO.HIGH)

GPIO.output(IN1B,GPIO.LOW)

GPIO.output(IN2A,GPIO.HIGH)

GPIO.output(IN2B,GPIO.LOW)

GPIO.output(IN3A,GPIO.HIGH)

GPIO.output(IN3B,GPIO.LOW)

GPIO.output(IN4A,GPIO.HIGH)

GPIO.output(IN4B,GPIO.LOW)

def bwd(): #function for backward movement

GPIO.output(IN1B,GPIO.HIGH)

GPIO.output(IN1A,GPIO.LOW)

GPIO.output(IN2B,GPIO.HIGH)

GPIO.output(IN2A,GPIO.LOW)

GPIO.output(IN3B,GPIO.HIGH)

GPIO.output(IN3A,GPIO.LOW)

GPIO.output(IN4B,GPIO.HIGH)

GPIO.output(IN4A,GPIO.LOW)

def left(): #function for left turn

GPIO.output(IN1A,GPIO.HIGH)

GPIO.output(IN1B,GPIO.LOW)

GPIO.output(IN2B,GPIO.HIGH)

GPIO.output(IN2A,GPIO.LOW)

GPIO.output(IN3B,GPIO.HIGH)

GPIO.output(IN3A,GPIO.LOW)

GPIO.output(IN4A,GPIO.HIGH)

GPIO.output(IN4B,GPIO.LOW)

def right(): #function for right turn

GPIO.output(IN1B,GPIO.HIGH)

GPIO.output(IN1A,GPIO.LOW)

GPIO.output(IN2A,GPIO.HIGH)

GPIO.output(IN2B,GPIO.LOW)

GPIO.output(IN3A,GPIO.HIGH)

GPIO.output(IN3B,GPIO.LOW)

GPIO.output(IN4B,GPIO.HIGH)

GPIO.output(IN4A,GPIO.LOW)

def stop(): #function for stop

GPIO.output(IN1A,GPIO.LOW)

GPIO.output(IN1B,GPIO.LOW)

GPIO.output(IN2A,GPIO.LOW)

GPIO.output(IN2B,GPIO.LOW)

GPIO.output(IN3A,GPIO.LOW)

GPIO.output(IN3B,GPIO.LOW)

GPIO.output(IN4A,GPIO.LOW)

GPIO.output(IN4B,GPIO.LOW)

try:

while True:

print ("forward")

fwd()

time.sleep(2)

print("backward")

bwd()

time.sleep(2)

print("left")

left()

time.sleep(2)

print("right")

right()

time.sleep(2)

print("stop")

stop()

time.sleep(2)

except KeyboardInterrupt:

GPIO.cleanup()

'''connection in chasis

motor1---------------motor2

| |

| |

| |

| |

motor3---------------motor4'''