#This is a simple python script to move a raspberry pi robot using WiFi

import RPi.GPIO as GPIO

import socket

import csv

import time

import os

import re

import subprocess

LeftMotarForward = 33

RightMotarForward = 31

LeftMotarReverse = 29

RightMotarReverse = 35

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(LeftMotarForward,GPIO.OUT)

GPIO.setup(RightMotarForward,GPIO.OUT)

GPIO.setup(LeftMotarReverse,GPIO.OUT)

GPIO.setup(RightMotarReverse,GPIO.OUT)

#Setting up UDP ip address and port

UDP\_IP = "192.168.29.123"

UDP\_PORT = 5000

sock = socket.socket(socket.AF\_INET,socket.SOCK\_DGRAM)

sock.bind((UDP\_IP, UDP\_PORT))

while True:

data, addr = sock.recvfrom(1024)

raw=data

print raw

if raw=="A":

GPIO.output(LeftMotarForward,True)

GPIO.output(RightMotarForward,True)

GPIO.output(LeftMotarReverse,False)

GPIO.output(RightMotarReverse,False)

print "Robot Moving Forward"

elif raw=="E":

GPIO.output(LeftMotarForward,False)

GPIO.output(RightMotarForward,False)

GPIO.output(LeftMotarReverse,False)

GPIO.output(RightMotarReverse,False)

print "Robot Stoped"

elif raw=="B":

GPIO.output(LeftMotarForward,False)

GPIO.output(RightMotarForward,False)

GPIO.output(LeftMotarReverse,True)

GPIO.output(RightMotarReverse,True)

print "Robot Moving Backward"

elif raw=="R":

GPIO.output(LeftMotarForward,True)

GPIO.output(RightMotarForward,False)

GPIO.output(LeftMotarReverse,False)

GPIO.output(RightMotarReverse,False)

print "Robot Moving Right"

elif raw=="L":

GPIO.output(LeftMotarForward,False)

GPIO.output(RightMotarForward,True)

GPIO.output(LeftMotarReverse,False)

GPIO.output(RightMotarReverse,False)

print "Robot Moving Left"

else:

pass

#else:

# print "Killing all processes and sending control back to user"

#subprocess.call("./kill\_process.sh")

GPIO.cleanup()