import Tkinter as tk

import RPi.GPIO as gpio

#Associate pin numbers with direction

rightForward = 11

rightBackward = 13

leftForward = 15

leftBackward = 16

def init():

#setup GPIO using board numbering

gpio.setmode(gpio.BOARD)

gpio.setup(rightForward, gpio.OUT)

gpio.setup(rightBackward, gpio.OUT)

gpio.setup(leftForward, gpio.OUT)

gpio.setup(leftBackward, gpio.OUT)

def forward():

gpio.output(leftForward, gpio.HIGH)

gpio.output(rightForward, gpio.HIGH)

def backward():

gpio.output(leftBackward, gpio.HIGH)

gpio.output(rightBackward, gpio.HIGH)

def left():

gpio.output(leftBackward, gpio.HIGH)

gpio.output(rightForward, gpio.HIGH)

def right():

gpio.output(leftForward, gpio.HIGH)

gpio.output(rightBackward, gpio.HIGH)

def stop():

gpio.output(leftForward, gpio.LOW)

gpio.output(leftBackward, gpio.LOW)

gpio.output(rightForward, gpio.LOW)

gpio.output(rightBackward, gpio.LOW)

# Called when a key is pressed

def key\_input(event):

init()

# Checks if key press was Esc

if ord(event.char) == 27:

gpio.cleanup()

quit()

print 'Key:', event.char

key\_press = event.char.lower()

if key\_press == 'w':

forward()

elif key\_press == 's':

backward()

elif key\_press == 'a':

left()

elif key\_press == 'd':

right()

else:

print 'Invalid input! Use W,A,S,D to move.'

# Called when a key is released

def key\_release(event):

stop()

command = tk.Tk()

command.bind('<KeyPress>', key\_input)

command.bind('<KeyRelease>', key\_release)

command.mainloop()