import RPi.GPIO as GPIO

import time

import os

import signal

import sys

if ('TRAFFIC\_LIGHT\_COUNTRY' in os.environ) and (os.environ['TRAFFIC\_LIGHT\_COUNTRY'] in ['UK', 'USA']):

pattern = os.environ['TRAFFIC\_LIGHT\_COUNTRY'].lower()

else:

print('TRAFFIC\_LIGHT\_COUNTRY should be set to UK or USA')

sys.exit(1)

# Setup

GPIO.setmode(GPIO.BCM)

GPIO.setup(9, GPIO.OUT)

GPIO.setup(10, GPIO.OUT)

GPIO.setup(11, GPIO.OUT)

# Turn off all lights when user ends demo

def allLightsOff(signal, frame):

GPIO.output(9, False)

GPIO.output(10, False)

GPIO.output(11, False)

GPIO.cleanup()

sys.exit(0)

signal.signal(signal.SIGINT, allLightsOff)

# Loop forever

while True:

# Red

GPIO.output(9, True)

time.sleep(3)

# Red and amber for UK only

if (pattern == 'uk'):

GPIO.output(10, True)

time.sleep(1)

# Green

GPIO.output(9, False)

GPIO.output(10, False)

GPIO.output(11, True)

time.sleep(5)

# Amber, longer in US than UK

GPIO.output(11, False)

GPIO.output(10, True)

if (pattern == 'uk'):

time.sleep(2)

else:

time.sleep(3)

# Amber off (red comes on at top of loop)

GPIO.output(10, False)