INNOVATION, EMPLOYABILITY PROFESSIONAL READINESS FOR AND ENTREPRENEURSHIP

ASSIGNMENT-3

# PYTHON CODE FOR BLINKING LED AND TRAFFIC LIGHTS

FOR RASPBERRY PI

SUBMITTED BY

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PYTHON CODE

import RPi.GPIO as GPIO

import time

import signal

import sys

# 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

GPIO.output(10, True)

time.sleep(1)

# Green

GPIO.output(9, False)

GPIO.output(10, False)

GPIO.output(11, True)

time.sleep(5)

# Amber

GPIO.output(11, False)

GPIO.output(10, True)

time.sleep(2)

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

GPIO.output(10, False)