Assignment -3

Python Programming

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| Assignment Date | 06 October 2022 |
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Question-1:

Write python code for blinking LED and Traffic lights for Raspberry pi.

Solution:

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)