

Assignment -3
Python Programming

Assignment Date	08 October 2022
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Maximum Marks	2 Marks

Question:

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

Solution

```
import RPi.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

while True:

    GPIO.output(8, GPIO.HIGH)

    sleep(1)

    GPIO.output(8, GPIO.LOW)

    sleep(1)

import RPi.GPIO as GPIO

import time

import signal

Import sys

GPIO.setmode(GPIO.BCM)

GPIO.setup(9,GPIO.OUT)

GPIO.setup(10,GPIO.OUT)

GPIO.setup(11,GPIO.OUT)

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)

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)
```