

Assignment -3

Assignment Date	08 October 2022
Student Name	Udhayasankar V
Student Roll Number	611219106080
Maximum Marks	2 Marks

Question-1:

Write python code for blinking LED for Raspberry pi.

Solution:

```
import RPi.GPIO as GPIO
import time
GPIO.setmode(GPIO.BCM)
cnt = 0
MAIL_CHECK_FREQ = 1 # change LED status every 1
seconds
RED_LED = 4
GPIO.setup(RED_LED, GPIO.OUT)
while True:
    if cnt == 0 :
        GPIO.output(RED_LED, False)
        cnt = 1
    else:
        GPIO.output(RED_LED, True)
        cnt = 0
        time.sleep(MAIL_CHECK_FREQ)
        GPIO.cleanup()
```

Question-2:

Write python code for blinking Traffic lights for Raspberry pi.

Solution:

```
from gpiozero import Button, TrafficLights, Buzzer
from time import sleep
buzzer = Buzzer(15)
button = Button(21)
lights = TrafficLights(25, 8, 7)
while True:
    button.wait_for_press()
    buzzer.on()
    light.green.on()
    sleep(1)
```

lights.amber.on()

sleep(1)

lights.red.on()

sleep(1)

lights.off()

buzzer.off()