

Assignment -3
Python Programming

Assignment Date	05 October 2022
Student Name	B.Raghul
Student Roll Number	510119106009
Maximum Marks	2 Marks

Question 1:

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

SOLUTION:

a)BLINKING LED:

Python code:

```
import RPi.GPIO as GPIO
import time
LED_PIN = 17
GPIO.setmode(GPIO.BCM)
GPIO.setup(LED_PIN, GPIO.OUT)
while True:
    GPIO.output(LED_PIN, GPIO.HIGH)
    time.sleep(1)
    GPIO.output(LED_PIN, GPIO.LOW)
    time.sleep(1)
GPIO.cleanup()
```

b)TRAFFIC LIGHT CONTROL:

Python code:

```
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()
```

Circuit connection:

