

ASSIGNMENT – 03

Python Programming with Raspberry pi

Assignment Date	07 October 2022
Student Name	Manojkumar M
Student Roll Number	111619106077

1.CODE FOR BLINKING LED:

```
import RPi.GPIO as GPIO
import time

#assign numbering for the GPIO using BCM
GPIO.setmode(GPIO.BCM)

#assign number for the GPIO using Board
#GPIO.setmode(GPIO.BOARD)

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()
```

2.CODE FOR TRAFFIC LIGHTS:

```
from gpio zero import Button, Traffic Lights, Buzzer
from time import sleep    buzzer = Buzzer(15)
button = Button(21)    lights = Traffic Lights(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()
```