ASSIGNMENT – 03

Python Programming with Raspberry pi

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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:

ifcnt == 0 :

GPIO.output(RED_LED, False)

cnt = 1
```

```python
    else:
        GPIO.output(RED_LED, True)
    cnt = 0
    time.sleep(MAIL_CHECK_FREQ)
GPIO.cleanup()
```

2.CODE FOR TRAFFIC LIGHTS:

```python
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()
```