**ASSIGNMENT-3**

Python Programming

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| Assignment Date | 07 OCTOBER 2022 |
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**Write  python code for blinking LED and Traffic lights for Raspberry Pi.**

**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

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()