**Assignment -3**

Python Programming

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| Assignment Date | 29 September 2022 |
| Student Name | T.Rahul |
| Student Roll Number | 912419104023 |
| Maximum Marks | 2 Marks |

**Question-1:**

**Write python code for blinking LED and Traffic lights for Raspberry pi (Only python code is enough,no need to execute in raspberry pi).**

**Solution:-**

**Python 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()

**Python code for Traffic Lights:**

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()