

IBM ASSIGNMENT 3

Assignment Date	October 5, 2022
Student Name	Lokesh S
Student Roll Number	611219106042
Maximum marks	2 Marks

Question-1: Write python code for blinking LED and Traffic lights for Raspberry pi

PROGRAM:

Program for LED interface with Raspberry pi:

```
-----  
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()
```

Program for traffic light interface with Raspberry pi:

```
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()
```