ASSIGMNENT-III

**QUESTION:**

Write python code for blinking LED and traffic light for Raspberry pi.

# PYTHON CODE FOR BLINKING LED:

import RPi.GPIO as GPIO import time GPIO.setmode(GPIO.B CM) cnt = 0

MAIL\_CHECK\_FREQ = 1

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\_F REQ) GPIO.cleanup()

# PYTHON CODE FOR TRAFFIC LIGHT:

import RPi.GPIO as GPIO import time try:

def lightTraffic(led1, led2, led3, delay): GPIO.output(led1, 1)

time.sleep(delay) GPIO.output(led1, 0) GPIO.output(led2,1)

time.sleep(delay) GPIO.output(led2, 0)

GPIO.output(led3, 1) time.sleep(delay) GPIO.output(led3, 0) GPIO.setmode(GPIO.BC M) button = 19

GPIO.setup(button, GPIO.IN, pull\_up\_down=GPIO.PUD\_UP) ledGreen = 16

ledYellow = 12

ledRed = 23 GPIO.setup(ledGreen, GPIO.OUT)

GPIO.setup(ledYellow, GPIO.OUT) GPIO.setup(ledRed, GPIO.OUT)

while True:

input\_state = GPIO.input(button) if input\_state == False:

print('Button Pressed') lightTraffic(ledGreen, ledYellow,

ledRed, 1)

else:

GPIO.output(ledGreen, 0)

GPIO.output(ledYellow, 0)

GPIO.output(ledRe d, 0) except KeyboardInterrupt: print

"You've exited the program" finally: GPIO.cleanup()