**ASSIGNMENT- 3**

***Write a python code for blinking LED and Traffic lights for Raspberry Pi.***

***Blinking LED***

import RPi.GPIO as GPIO

import time

#assign number 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()

***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,BCM)

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”)

LightTrafic(ledGreen,ledYellow,ledRed,1)

else:

GPIO.output(ledGreen,0)

GPIO.output(ledYellow,0)

GPIO.output(ledRed,0)

except KeyboardInterrupt

Print

“You have exited the program”

finally:

GPIO.cleanup()