**ASSIGNMENT -3**

**PYTHON CODE FOR BLINKING LED (Raspberry pi)**

import RPi.GPIO as GPIO

import time

GPIO.setmode(GPIO.BCM)

GPIO.setwarnings(False)

GPIO.setup(18,GPIO.OUT)

print "LED on"

GPIO.output(18,GPIO.HIGH)

time.sleep(1)

print "LED off"

GPIO.output(18,GPIO.LOW)

**PYTHON CODE FOR TRAFFIC LIGHT (Raspberry pi)**

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')

lightTraffic(ledGreen, ledYellow, ledRed, 1)

else:

GPIO.output(ledGreen, 0)

GPIO.output(ledYellow, 0)

GPIO.output(ledRed, 0)

except KeyboardInterrupt:

print "You've exited the program"

finally:

GPIO.cleanup()