**PYTHON CODE FOR BLINKING LED:**

import RPi.GPIO as GPIO

ledPin = 22

def setup():

GPIO.setmode(GPIO.BOARD)

GPIO.setup(ledPin, GPIO.OUT)

GPIO.output(ledPin, GPIO.LOW)

def loop():

while True:

print 'LED on'

GPIO.output(ledPin, GPIO.HIGH)

time.sleep(1.0)

print 'LED off'

GPIO.output(ledPin, GPIO.LOW)

time.sleep(1.0)

def endprogram():

GPIO.output(ledPin, GPIO.LOW)

GPIO.cleanup()

if \_\_name\_\_ == '\_\_main\_\_':

setup()

try:

loop()

except KeyboardInterrupt:

endprogram()

**PYTHON CODE FOR TRAFFIC LIGHTS :**

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()