**ASSIGNMENT 3**

**QUESTION :**

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

Answer :

**BLINKING LED**

import RPi.GPIO as GPIO

import time

ledPin = 22

def setup():

GPIO.setmode(GPIO.BOARD)

GPIO.setup(ledPin, GPIO.OUT) #ledPin as output

GPIO.output(ledPin, GPIO.LOW)

def loop():

while True:

print 'LED on'

GPIO.output(ledPin, GPIO.HIGH) # LED On

time.sleep(1.0) # wait 1 sec

print 'LED off'

GPIO.output(ledPin, GPIO.LOW) # LED Off

time.sleep(1.0) # wait 1 sec

def endprogram():

GPIO.output(ledPin, GPIO.LOW) # LED Off

GPIO.cleanup() # Release resources

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

setup()

try:

loop()

except KeyboardInterrupt:

endprogram()

**Traffic Lights**

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.yellow.on()

sleep(1)

lights.red.on()

sleep(1)

lights.off()

buzzer.off()