**ASSIGNMENT-3**

**PYTHON CODE FOR BLINKING LED AND TRAFFIC LIGHTS FOR RASPBERRY PI**

**For LED:**

import RPi.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(8,GPIO.OUT,initial=GPIO.LOW)

while True:

GPIO.output(8,GPIO.HIGH)

sleep(1)

GPIO.output(8,GPIO.LOW) sleep(1)

**For Traffic Lights:**

import Rpi.GPIO as GPIO

import time

import signal

import sys

GPIO.setmode(GPIO.BCM)

GPIO.setup(9,GPIO.OUT)

GPIO.setup(10,GPIO.OUT)

GPIO.setup(11,GPIO.OUT)

def allLightsOff(signal,framer):

GPIO.output(9,False)

GPIO.output(10,False)

GPIO.output(11,False)

GPIO.cleanup()

sys.exit(0)

signal.signal(signal.SIGINT,allLightsOff)

while True:

#Red

GPIO.output(9,True)

Time.sleep(3)

#Red and amber

GPIO.output(10,True)

Time.sleep(1)

#Green

GPIO.output(9,False)

GPIO.output(10,False)

GPIO.output(11,True)

Time.sleep(5)

#Amber

GPIO.output(11,False)

GPIO.output(10, True)

Time.sleep(2) #Amber off(red comes on at top of loop)

GPIO.output(10,False)