**ASSIGNMENT: 3**

**Ganesh M**

**1.** **Write a python code for blinking LED for Raspberry pi.**

importRPi.GPIO as GPIO

from time import sleep

GPIO.setwarnings(False)

GPIO.setmode(GPIO.BOARD)

GPIO.setup(7, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an output pin and set initial value to low (off)

while True:

GPIO.output(7, GPIO.HIGH) # Turn on

sleep(1) # Sleep for 1 second

GPIO.output(7, GPIO.LOW) # Turn off

sleep(1) # Sleep for 1 second

**2**. **Write python code for Traffic lights for Raspberry pi.**

importRPi.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)

defallLightsOff(signal, frame):

GPIO.output(9, False)

GPIO.output(10, False)

GPIO.output(11, False)

GPIO.cleanup()

sys.exit(0)

signal.signal(signal.SIGINT, allLightsOff)

while True:

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)