

### ASSIGNMENT -3

Assignment Date	10 October 2022
Student Name	Merlin alfin.M
Student Roll Number	710419106020
Maximum Marks	2 Marks

#### Question:

Write a python code for blinking LED and Traffic lights for Raspberry pi.

#### Solution:

##### 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)
```