ASSIGNMENT-3

Python Program

Assignment Date	03 October 2022
Student Name	Vanathi.M
Student Roll Number	812019106040
Maximum Marks	2 Marks

Question-1

Write python code for blinking LED and Traffic lights for Raspberry pi.Only python code is enough, no need to execute in raspberry pi.

Code: #Blinking

LED

```python
import RPi.GPIO as GPIO import
time GPIO.setmode(GPIO.BCM)
GPIO.setwarnings(False)
GPIO.setup(18,GPIO.OUT)
print("LED on")
GPIO.output(18,GPIO.HIGH)
time.sleep(1) print("LED
off")
GPIO.output(18,GPIO.LOW)
#Traffic Light
```

from gpiozero import Button, TrafficLights, Buzzer
from time import sleep buzzer = Buzzer(15) button
= Button(21) lights = TrafficLights(25, 8, 7)

#Button   21

#Red LED   25

#Yellow LED   08

#Green LED   07

#Buzzer   15

while True:

   button.wait_for_press()

   buzzer.on()

   light.green.on()

   sleep(1)

   lights.amber.on()

   sleep(1) lights.red.on()

   sleep(1) lights.off()

   buzzer.off()

In Compiler:

```
#Blinking LED

import RPi.GPIO as GPIO
import time
GPIO.setmode(GPIO.BCM)
GPIO.setwarnings(False)
GPIO.setup(18,GPIO.OUT)
print("LED on") GPIO.output(18,
GPIO.HIGH) time.sleep(1
print("LED off"
GPIO.output(
```

```
#Traffic Light from
gpiozero from time
import buzzer = Buzzer(
button = Button( lights
= TrafficLights(

#Button
#Red LED
#Yellow LED
#Green LED
#Buzzer
while True: )
            )
        18,GPIO.LOW)

    import Button, TrafficLights, Buzzer sleep
       15)
       21)
            25, 8, 7)

                        21
                        25
                        08
                        07
                        15
```
```
button.wait_for_press()
buzzer.on()
light.green.on() sleep(1)
lights.amber.on() sleep(1)
lights.red.on() sleep( 1)
lights.off() buzzer.off()
```