ASSIGNMENT-3

Python Program

Assignment Date	03 October 2022
Student Name	Sudhakar.S
Student Roll Number	812019106037
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

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)
```

```python
#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:

```python
#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(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  while                 15
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()
```