Assignment - 3

Question:

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

1. Raspberry Pi Program to Blink A LED

```
Import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library

from time import sleep # Import the sleep function from the time module

GPIO.setwarnings(False) # Ignore warning for now

GPIO.setmode(GPIO.BOARD) # Use physical pin numbering

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an

output pin and set initial value to low (off) while True: # Run forever

GPIO.output(8, GPIO.HIGH) # Turn on sleep(1) # Sleep for 1 second

    GPIO.output(8, GPIO.LOW) # Turn off sleep(1) #

    Sleep for 1 second
```

2. Raspberry Pi Program for Traffic Light.

```python
from gpiozero import Buzzer
from gpiozero import Button
from gpiozero import LED
from time import sleep

button = Button (21)
buzzer = Buzzer (15)
redled = LED(25)
yellowled = LED(8)
greenled = LED(7)

while True:
    if button.is_pressed:
        redled.on()
        buzzer.on()
        sleep(2)
        redled.off()
        buzzer.off()
        yellowled.on()
        sleep(2)
        yellowled.off()
        greenled.on()
        sleep(2)
        greenled.off()
        break
```