Assignment -3
Python Programming

Assignment Date	05 October 2022
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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.

Note: you are allowed to use web search and complete the assignment.

SOLUTION:

(A) Blinking of LED:

```python
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
```

(B) Traffic Light

```
from gpiozero import LED
import time
red=LED(16)
yellow=LED(18)
green=LED(17)
red.on()
time.sleep(5)
red.off()
yellow.on()
time.sleep(3)
yellow.off()
green.on()
time.sleep(5)
green.off()
```