

Assignment - 3

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.

#led blink program

```
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) # Sleep for 1 second
    GPIO.output(8, GPIO.LOW)
    sleep(1) # Sleep for 1 second
```

#traffic light program

```
import RPi.GPIO as GPIO
from time import sleep
```

```
GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)
GPIO.setup(10, GPIO.OUT, initial=GPIO.LOW)
GPIO.setup(12, GPIO.OUT, initial=GPIO.LOW)
```

```
while True:
```

```
    #turn red light
```

```
    GPIO.output(8, GPIO.HIGH)
    sleep(2)
    GPIO.output(8, GPIO.LOW)
    sleep(2)
```

```
    #turn yellow light
```

```
    GPIO.output(10, GPIO.HIGH)
```

```
sleep(2)
GPIO.output(10, GPIO.LOW)
sleep(2)
```

```
#turn green light
```

```
GPIO.output(12, GPIO.HIGH)
sleep(2)
GPIO.output(12, GPIO.LOW)
sleep(2)
```