

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 BLINKING :

```
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(10, 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(10, GPIO.HIGH) # Turn on
    sleep(1000) # Sleep for 1 second
    GPIO.output(10, GPIO.LOW) # Turn off
    sleep(1000) # Sleep for 1 second
```

TRAFFIC LIGHT

```
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(10, GPIO.OUT, initial=GPIO.LOW) # Set pin 10 as output for red
GPIO.setup(11, GPIO.OUT, initial=GPIO.LOW) # Set pin 11 as output for yellow
GPIO.setup(12, GPIO.OUT, initial=GPIO.LOW) # Set pin 12 as output for green
while True: # Run forever
    GPIO.output(10, GPIO.HIGH) # Turn on
    GPIO.output(11, GPIO.LOW) # Turn off
    GPIO.output(12, GPIO.LOW) # Turn off
    sleep(60) # Sleep for 1 second
    GPIO.output(10, GPIO.LOW) # Turn on
    GPIO.output(11, GPIO.HIGH) # Turn off
    GPIO.output(12, GPIO.LOW) # Turn off
    sleep(10) # Sleep for 1 second
    GPIO.output(10, GPIO.LOW) # Turn on
    GPIO.output(11, GPIO.LOW) # Turn off
    GPIO.output(12, GPIO.HIGH) # Turn off
    sleep(120);
```