

/* 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.*/

#python code for blinking LED in raspberry pi

```
import RPi.GPIO as GPIO    #importing GPIO library
import time                #importing time library
LED_PIN = 11
GPIO.setmode(GPIO.BOARD)   #enable BOARD pin numberings
GPIO.setup(LED_PIN, GPIO.OUT) #set PIN LED_PIN as output
while True:
    GPIO.output(LED_PIN,1)   #send output 5v to pin LED_PIN
    time.sleep(1)           #introduce 1 sec time delay
    GPIO.output(LED_PIN, 0)  #send output 0v to pin LED_PIN
    time.sleep(1)           #introduce 1 sec time delay
    GPIO.output(LED_PIN, 1)  #send output 5v to pin LED_PIN
    time.sleep(1)           #introduce 1 sec time delay
    GPIO.output(LED_PIN, 0)  #send output 0v to pin LED_PIN
    time.sleep(1)           #introduce 1 sec time delay
    GPIO.output(LED_PIN, 1)  #send output 5v to pin LED_PIN
    time.sleep(1)           #introduce 1 sec time delay
GPIO.cleanup()
```

#python code for the traffic light in raspberry pi

```
import RPi.GPIO as GPIO    #importing GPIO library
import time                #importing time library
GPIO.setmode(GPIO.BOARD)   #enable BOARD pin numberings

Red = 7
Yellow = 11
Green = 13

GPIO.setup(red, GPIO.OUT)
GPIO.setup(yellow, GPIO.OUT)
GPIO.setup(green, GPIO.OUT)

while True:
    GPIO.output(red,True)
    time.sleep(3)
    GPIO.output(red, False)

    GPIO.output(yellow,True)
    time.sleep(1)
    GPIO.output(yellow, False)

    GPIO.output(green ,True)
    time.sleep(3)
    GPIO.output(green, False)

GPIO.cleanup()
```