

ASSIGNMENT-III

Assignment Date	07 October 2022
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QUESTION:

Write a python code for blinking LED and traffic light for Raspberry pi

BLINKING LED:

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

GP.setwarnings(False)

GP.setmode(GP.BOARD)

GP.setup(8,GP.OUT,initial=GP.LOW)

while True:

    GP.output(8, GPIO.HIGH)

    print("The LED is ON")

    sleep(2)

    GP.output(8, GPIO.LOW)

    print("The LED is OFF")

    sleep(2)
```

TRAFFIC LIGHT:

```
import RPi.GPIO as GPIO

import time

GPIO.setmode(GPIO.BOARD)

GPIO.setup(7,GPIO.OUT)

GPIO.setup(11,GPIO.OUT)

GPIO.setup(13,GPIO.OUT)

GPIO.setup(15,GPIO.IN,pull_up_down_=GPIO.UP)

def turn_on(pin,seconds):

    GPIO.output(pin.GPIO.HIGH) time.sleep(seconds)

def turn_off(pin,seconds):
```

```
GPIO.output(pin.GPIO.LOW) time.sleep(seconds)

try:
while True:
button_state=GPIO.input(15)
if button_state==True:
turn_on(13,2)
turn_off(13,.1)
turn_on(7,4)
turn_off(7,.1)
turn_on(11,1)
turn_off(11,.1)
else:
if button_state==False:
GPIO.output(7,GPIO.LOW)
GPIO.output(11,GPIO.LOW)
GPIO.output(13,GPIO.LOW) time.sleep(.1)
except KeyboardInterrupt:
GPIO.cleanup()
print("TRAFFIC LIGHT SEQUENCE DONE")
```