

ASSIGNMENT 3

ASSIGNMENT DATE	6 OCTOBER 2022
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MAXIMUM MARKS	2 marks

QUESTION: WRITE A PYTHON CODE FOR BLINKING LED AND TRAFFIC LIGHT FOR RASPBERRY PI.

```
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")
```