

ASSIGNMENT 3
MAHENDRA INSTITUTE OF TECHNOLOGY

Date	10 October2022
Team ID	PNT2022TMID17220
Project Name	Signs with smart connectivity for better road safety
Maximum Marks	2 Marks

```
import RP1.GPIO as GP10
```

```
import time
```

```
GPIO. setmode(GPIO.BOARD)
```

```
GPIO.setup(7, GPIO.OUT) #Green LED
```

```
GPIO.setup(11, GPIO.OUT)#Yellow LED
```

```
GPIO.setup(13, GPIO.OUT) #Red LED
```

```
GPIO.setup(15, GP10.IN, pull_up_down=GPIO.PUD_UP)#Button
```

```
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)

    tum_off(13,.1)

    turn_on(7,4)

    turn_off(7,.11)

    turn_on(11,1)

    turn_off(11,1)

else:

    if button_state== False:

        GPIO.output (7,GPIO.LOW)

        GPIO.output(11,GPIO.LOW)

        GP10.output (13,GPIO.LOW)

        time.sleep(.1)

except KeyboardInterrupt:

    GPIO.cleanup()

    print("Traffic Light Sequence Done")
```