

### Assignment -3

TEAM ID	PNT2022TMID38457
PROJECT TITLE	Industry-Specific Intelligent Fire Management System

#### QUESTION :

Write python code for blinking LED and Traffic lights for Raspberry pi.

Only python code is enough, no need to execute in raspberry pi.

#### Solution :

# Blinking LED

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

```
GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)
```

```
while True:
    GPIO.output(8, GPIO.HIGH)
    sleep(1)
    GPIO.output(8, GPIO.LOW)
    sleep(1)
```

```
# Traffic light Simulation
import RPi.GPIO as GPIO
import time
import signal
import sys
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)
```

```
while True:
    # Red
    GPIO.output(9, True)
    time.sleep(3)
    # Red and amber
    GPIO.output(10, True)
    time.sleep(1)
    # Green
    GPIO.output(9, False)
    GPIO.output(10, False)
```

```
GPIO.output(11, True)
time.sleep(5)
```

```
# Amber
GPIO.output(11, False)
GPIO.output(10, True)
time.sleep(2)
```

```
# Amber off (red comes on at top of loop)
GPIO.output(10, False)
```