

ASSIGNMENT 3

TEAM ID: PNT2022MID21384

TEAM LEADER: MUKILAN T V-917719D051

TEAM MEMBER: RAGUL SHANKAR S – 917719D068

TEAM MEMBER: SANTHOSH S – 917719D079

TEAM MEMBER: SEEMAN CHAKKARAVARTHY V – 917719D083

PROGRAM

LED BLINKING:

```
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:

```
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)

def allLightsOff(signal, frame):

    GPIO.output(9, False)

    GPIO.output(10, False)

    GPIO.output(11, False)

    GPIO.cleanup()

    sys.exit(0)
```

```
signal.signal(signal.SIGINT, allLightsOff)
```

```
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)
```