

## ASSIGNMENT – 3

### BlinkingLights.py

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

```
PIN = 8
```

```
GPIO.setmode(GPIO.BCM)
GPIO.setup(PIN, GPIO.OUT)
GPIO.output(PIN, GPIO.LOW)
```

```
while True:
```

```
    GPIO.output(8, GPIO.HIGH)
    sleep(2)
    GPIO.output(8, GPIO.LOW)
    sleep(2)
```

### Traffic Lights.py

```
import RPi.GPIO as GPIO
from time import sleep
from signal, SIGINT import signal
import sys
```

```
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT) # RED
GPIO.setup(10, GPIO.OUT) # AMBER
GPIO.setup(11, GPIO.OUT) # GREEN
```

```
def allLightsOff(signal, frame):
```

```
    GPIO.output(9, False)
```

```
    GPIO.output(10, False)
```

```
    GPIO.output(11, False)
```

```
    GPIO.cleanup()
```

```
    sys.exit(0)
```

```
signal(SIGINT, allLightsOff) # Turns of all lights on interruption
```

```
while True:
```

```
    # Turn on Red
```

```
    GPIO.output(9, True)
```

```
    sleep(10)
```

```
    # Turn of Red and enable Green
```

```
    GPIO.output(9, False)
```

```
    GPIO.output(11, True)
```

```
    sleep(5)
```

```
    # Turn off Green and enable Amber
```

```
    GPIO.output(11, False)
```

```
    GPIO.output(10, True)
```

```
    sleep(2)
```

```
    # Turn off Amber
```

```
    GPIO.output(10, False)
```

```
    # Loops again from red
```

