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
```