

IBM NALAIYA THIRAN

ASSIGNMENT – 3

Python Code for Traffic light automation with Raspberry Pi:

```
import RPi.GPIO as GPIO
import time
import signal
import sys

# Setup
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)

# Turn off all lights
def allLightsOff(signal, frame):
    GPIO.output(9, False) #red light
    GPIO.output(10, False) #yellow light
    GPIO.output(11, False) #Green light
    GPIO.cleanup()
    sys.exit(0)

signal.signal(signal.SIGINT, allLightsOff)

# Loop forever
while True:
    # Red
    GPIO.output(9, True)
    time.sleep(3)

    #Yellow
    GPIO.output(9, False)
    GPIO.output(10, True)
    time.sleep(2)

    # Green
    GPIO.output(9, False)
    GPIO.output(10, False)
    GPIO.output(11, True)
    time.sleep(5)
```