

## ASSIGNMENT 3

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

#### Solution:

```
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 when user ends demo
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)

# Loop forever 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)
```

