

Assignment 3

Write a python code for LED blinking and traffic with raspberry pi:

Code:

```
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)
GPIO.output(11, False)
GPIO.output(10, True)
time.sleep(2)
import machine
import utime
led_red=machine.Pin(15,machine.Pin.OUT)
led_yellow=machine.Pin(14,machine.Pin.OUT)
led_green=machine.Pin(15,machine.Pin.OUT)
while true:
    led_red.value(1)
    utime.sleep(5)
    led_yellow.value(1)
    utime.sleep(2)
    led_red.value(0)
    led_yellow.value(0)
    led_green.value(1)
    utime.sleep(5)
    led_green.value(0)
    led_yellow.value(1)
    utime.sleep(5)
    led_yellow.value(0)
```

Output:

