

718019L111

ASSIGNMENT – 3

(i) Python Code for Blinking LED:

Output Window:

[illegible]

(ii) Python Code for Traffic Lights:

```
1 import RPi.GPIO as GPIO
2 import time
3 import signal
4 import sys
5 #setup
6 GPIO.setmode(GPIO.BCM)
7 GPIO.setup(9, GPIO.OUT)
8 GPIO.setup(10, GPIO.OUT)
9 GPIO.setup(11, GPIO.OUT)
10 #Turn off all lights
11 def allLightOff(signal, frame):
12     GPIO.output(9,False)
13     GPIO.output(10,False)
14     GPIO.output(11,False)
15     GPIO.cleanup()
16     sys.exit(0)
17 signal.signal(signal.SIGINT, allLightsOff)
18 #Forever Loop
19 while True:
20     #Red
21     GPIO.output(9, True)
22     time.sleep(3)
23     GPIO.output(10, True)
24     time.sleep(1)
25     #Green
26     GPIO.output(9,False)
27     GPIO.output(10,False)
28     GPIO.output(11,True)
29     time.sleep(5)
30     #Amber
31     GPIO.output(11,False)
32     GPIO.output(10,True)
33     time.sleep(2)
34     #Amber off
35     GPIO.output(10,False)
```