

ASSIGNMENT 3 T.A.Kavoprakash(**Team Leader**),Chiradeep,kumaravel,poovarasan

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)
```

