

Assignment -3
Python Code for Blinking led & Traffic lights

Assignment Date	7 OCTOBER 2022
Student Name	RAMYA H
Student Roll Number	513419106028
Maximum Marks	

Question-1:

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

Solution

#BLINKING LED—RAMYA

```
import time
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)
GPIO.setup(18, GPIO.OUT)
while True:
```

```
    GPIO.output(18,True) # Turn on Led
    time.sleep(1)
```

```
    GPIO.output(18,False) # Turn off Led
    time.sleep(1)
```

#TRAFFIC LIGHTS

```
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)
# 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)
```