

ASSIGNMENT 3

Blinking LED

```
import RPi.GPIO as GPIO
```

```
from time import sleep
```

```
GPIO.setwarnings(False)
```

```
GPIO.setmode(GPIO.BOARD)
```

```
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)
```

```
while True:
```

```
    GPIO.output(8, GPIO.HIGH)
```

```
    sleep(1)
```

```
    GPIO.output(8, GPIO.LOW)
```

```
    sleep(1)
```

Traffic light Simulation

```
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)
```

```
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)
```