ASSIGNMENT -3

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CODE 1:

LED BLINKING

```
import RPi.GPIO as GPIO
import time
GPIO.setmode(GPIO.BCM)
cnt = 0
MAIL_CHECK_FREQ = 1
RED_LED = 4
GPIO.setup(RED_LED,
GPIO.OUT)
while True:
    if cnt == 0 :
    GPIO.output(RED_LED, False)
    cnt = 1
    else:
    GPIO.output(RED_LED, True)
    cnt = 0
time.sleep(MAIL_CHECK_FREQ)
```

```
GPIO.cleanup()
```

CODE 2:

TRAFFIC LIGHTS FOR RASPBERRY PI

```
import RPi.GPIO as GPIO
import time
try:
def lightTraffic(led1, led2, led3, delay ):
GPIO.output(led1, 1)
time.sleep(delay)
GPIO.output(led1, 0)
GPIO.output(led2, 1)
time.sleep(delay)
GPIO.output(led2, 0)
GPIO.output(led3, 1)
time.sleep(delay)
GPIO.output(led3, 0)
GPIO.setmode(GPIO.BCM)
button = 19
GPIO.setup(button, GPIO.IN, pull_up_down=GPIO.PUD_UP)
ledGreen = 16
ledYellow = 12
ledRed = 23
GPIO.setup(ledGreen, GPIO.OUT)
```

```
GPIO.setup(ledYellow, GPIO.OUT)
GPIO.setup(ledRed, GPIO.OUT)
while True:
input_state = GPIO.input(button)
if input_state == False:
print('Button Pressed')
lightTraffic(ledGreen, ledYellow, ledRed, 1)
else:
GPIO.output(ledGreen, 0)
GPIO.output(ledYellow, 0)
GPIO.output(ledRed, 0) except KeyboardInterrupt:
print ("You've exited the program")
finally:
GPIO.cleanup()
```