

PYTHON CODE FOR LED BLINKING FOR RASPBERRY PI

```
import RPi.GPIO as GPIO

import time

LED_PIN = 17

GPIO.setmode(GPIO.BCM)

GPIO.setup(LED_PIN, GPIO.OUT)

while True:

    GPIO.output(LED_PIN, GPIO.HIGH)

    time.sleep(1)

    GPIO.output(LED_PIN, GPIO.LOW)

    time.sleep(1)

GPIO.cleanup()
```

PYTHON CODE FOR 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()
```