

IBM ASSIGNMENT 3

NAMAE : MALATHI.P

Reg.No : 963019106002

Write a python code for blinking LED and traffic lights for Raspberry pi.

CODE:

```
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()
```