Team ID : PNT2022TMID06114

Project Name : Industry Specific Intelligent Fire Management System

Assignment - 3

Python Code For Blinking an LED Using Raspberry pi:-

```
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)
```

Python Code For Traffic Lights Using 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()
```