

**VSB ENGINEERING COLLEGE , KARUR**  
**ELECTRONICS AND COMMUNICATION ENGINEERING**  
**ASSIGNMENT - III**

**TITLE** : Industry Specific Intelligent Fire Management  
System

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**DOMAIN NAME** : Internet Of Things

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**Assignment Topic :**

Write a python code for Blinking LED and Traffic Light for Raspberry Pi .

**Required Materials :**

- ❖ Raspberry pi
- ❖ Arduino uno
- ❖ LED
- ❖ Breadboard

**Procedure :**

- ❖ To install the Python library open a terminal and execute the following.

```
$ sudo apt-get install python-rpi.gpio python3-rpi.gpi
```

❖ The Following things that to be done here are

**1. Initialize the GPIO ports**

**2. Turn the LED on and off in 1 second intervals**

### **Python Code :**

```
import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library
from time import sleep # Import the sleep function from the time module
GPIO.setwarnings(False) # Ignore warning for now
GPIO.setmode(GPIO.BOARD) # Use physical pin numbering
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an
output pin and set initial value to low (off)
while True: # Run forever
    GPIO.output(8, GPIO.HIGH) # Turn on
    sleep(1) # Sleep for 1 second
    GPIO.output(8, GPIO.LOW) # Turn off
    sleep(1) # Sleep for 1 second
```