

**HAZARDOUS AREA MONITORING FOR
INDUSTRIAL PLANTS POWERED BY IOT**

SUBMITTED BY

AJAY KRISHNA

**BACHELOR OF ENGINEERING ELECTRONICS
AND COMMUNICATION ENGINEERING**

Question:

Write python code for blinking LED and Traffic lights for Raspberry pi.

CODE 1: LED

BLINKING

```
import RPi.GPIO as GP from time import sleep
```

```
GP.setwarnings(False)
```

```
GP.setmode(GP.BOARD)
```

```
GP.setup(8,GP.OUT,initial=GP.LOW)
```

```
while True:
```

```
    #infinite loop GP.output(8, GPIO.HIGH)
```

```
    # Turn on  print("The LED is ON")
```

```
        sleep(2)                # Sleep for 2 second
```

```
GP.output(8, GPIO.LOW)
```

```
    # Turn off  print("The LED is OFF")
```

```
sleep(2)                # Sleep for 2 second
```

CODE 2:

TRAFFIC LIGHTS FOR RASPBERRY PI

```
From gpiozero import LED
```

```
From time import sleep
```

```
Red= LED(17) #pin numbers connected to Led's
```

```
Aster=(22) Green=(27)
```

```
While True:
```

```
Red.on()        #RED light
```

```
Print("Red light is ON") For
```

```
I in range(100,0,-1):
```

```
Print("Remaining time: ",i)
```

```
Sleep(1)
```

```
Red.off()
```

```
Aster.on() # ASTER light
```

```
Print("Yellow light is ON")
```

```
For I in range(5,0,-1):
```

```
Print("Remaining time: ",i)
```

```
Sleep(1)
```

```
Aster.off()
```

```
Green.on #GREEN light
```

```
Print("Green light is ON")
```

```
For I in range(30,0,-1):
```

```
Print("Remaining time: ",i)
```

```
Sleep(1)
```

```
Green.off()
```