

ASSIGNMENT-3

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

BLINKING LED:

```
#blink.py  
  
import time  
  
import RPi.GPIO as GPIO  
  
GPIO.setmode(GPIO.BCM)  
GPIO.setup(4,GPIO.OUT)  
GPIO.output(4,True)  
time.sleep(2)  
GPIO.output(4,False)
```

OR

```
import RPi.GPIO as GPIO  
import time  
GPIO.setmode(GPIO.BOARD)  
GPIO.setup(11,GPIO.OUT)  
GPIO.output(11,1)  
time.sleep(1)  
GPIO.output(11,1)  
time.sleep(1)  
GPIO.output(11,1)  
time.sleep(1)  
GPIO.output(11,0)  
time.sleep(1)  
GPIO.cleanup()
```

BLINKING LED AND TRAFFIC LIGHTS :

```
#!/usr/bin/python
```

```
Import time
```

```
Import RPi.GPIO as GPIO
```

```
try :
```

```
    GPIO.setmode(GPIO.BCM)
```

```
    GPIO.setwarnings(False)
```

```
    GPIO.setup(17,GPIO.OUT,initial=GPIO.HIGH) #Green LED
```

```
    GPIO.setup(27,GPIO.OUT, initial=GPIO.HIGH) #Red LED
```

```
    GPIO.setup(4,GPIO.OUT, initial=GPIO.HIGH) #Yellow LED
```

```
    #PUD_DOWN expecting a high voltage.
```

```
    GPIO.setup(22, GPIO.IN, pull_up_down=GPIO.PUD_DOWN)
```

```
    GPIO.setup(14,GPIO.OUT, initial=GPIO.LOW) #pin of buzzer -reset to low
```

```
While True :
```

```
    # GPIO.output(17,GPIO.HIGH)
```

```
    # GPIO.output(27,GPIO.HIGH)
```

```
    If (GPIO.input (22)==True):
```

```
        print ("button pressed")
```

```
        print (GPIO.input (22))
```

```
    while True :
```

```
        GPIO.output (17,GPIO.LOW) #green on
```

```
        time.sleep(2)
```

```
        GPIO.output(17,GPIO.HIGH) #green off
```

```
time.sleep(2)

GPIO .output (4,GPIO.LOW) #yellow on

time.sleep(2)

GPIO.output (4,GPIO.HIGH) #yellow off
```

except Exception as ex :

```
print ('Error occured',ex)
```

finally :

```
GPIO.cleanup ()
```