

# **ASSIGNMENT -3**

|                            |                         |
|----------------------------|-------------------------|
| <b>Team ID</b>             | <b>PNT2022TMID27689</b> |
| <b>Name</b>                | <b>SHOBICA A</b>        |
| <b>Student Roll Number</b> | <b>311419104069</b>     |
| <b>Maximum Marks</b>       | <b>2 Marks</b>          |

**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 ()
```