| Team ID             | PNT2022TMID44448               |
|---------------------|--------------------------------|
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| Topic               | Signs With smart connectivity  |
|                     | for better road safety         |
| Assignment 3        | Write python code for blinking |
|                     | LED and traffic lights         |
|                     | for Raspberry pi.              |

## **CODING:**

```
Import RP1.GPIO as GP10
import time
GPIO. setmode(GPIO.BOARD)
GPIO.setup(7, GPIO.OUT) #Green LED
GPIO.setup(11, GPI0.OUT)#Yellow LED
GPIO.setup(13, GPIO.OUT) #Red LED
GPIO.setup(15, GP10.IN, pull_up_down=GPIO.PUD_UP)#Button
def turn_on(pin, seconds):
    GPIO.output (pin,GPIO.HIGH)
    time.sleep(seconds)
def turn_off (pin, seconds):
    GPIO.output (pin, GPIO.LOW)
    time.sleep(seconds)
try:
    while True:
        button_state=GPIO.input (15)
        if button_state== True:
           turn_on(13,2)
           tum_off(13,.1)
           turn_on(7,4)
           turn_off(7,.11)
           turn_on(11,1)
           turn_off(11,1)
         else:
            if button_state== False:
               GPI0.output (7,GPI0.LOW)
               GPIO.output(11,GPIO.LOW)
               GP10.output (13,GPI0.LOW)
               time.sleep(.1)
```

```
except KeyboardInterrupt:
    GPIO.cleanup()
    print("Traffic Light Sequence Done")
```