

ASSIGNMENT -3

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| TEAM ID | PNT2022TMID31686 |
| REGISTER NO | 711719106016 |
| PROJECT NAME | IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE . |
| ASSIGNMENT -3 | WRITE PYTHON CODE FOR BLINKING LED AND TRAFFIC LIGHTS FOR RASPBERRY PI . ONLY PYTHON CODE IS ENOUGH ,NO NEED TO EXECUTE IN RASPBERRY PI . |

CODE:-

Traffic Light control:-

```
from
gpiozero
import
Button,
TrafficLights,
Buzzer from time import sleep
buzzer = Buzzer(15)
button = Button(21)
lights = TrafficLights(25, 8,7)
while True:
button.wait_for_press()
buzzer.on()
lights.green.on()
sleep(1)
lights.amber.on()sleep(1)
lights.red.on()
sleep(1)
lights.off()
buzzer.off()
```

Blinking Led:- 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
```