ASSIGNMENT - 03

Date	09 October 2022
Team ID	PNT2022TMID15011
Project Name	Project - IoT Based Smart Crop Protection System for Agriculture

CODE:

LED BLINKING :

```
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(10, 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(10,

GPIO.HIGH) # Turn on sleep(1000) # Sleep

for 1 second GPIO.output(10, GPIO.LOW) #

Turn off sleep(1000) # Sleep for 1 second
```

TRAFFIC LIGHT

```
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(10, GPIO.OUT, initial=GPIO.LOW) # Set pin 10 as output for red

GPIO.setup(11, GPIO.OUT, initial=GPIO.LOW) # Set pin 11 as output for yellow

GPIO.setup(12, GPIO.OUT, initial=GPIO.LOW) # Set pin 12 as output for green while

True: # Run forever

GPIO.output(10, GPIO.HIGH) # Turn on
```

```
GPIO.output(11, GPIO.LOW) # Turn off
GPIO.output(12, GPIO.LOW) # Turn off
sleep(60) # Sleep for 1 second
GPIO.output(10, GPIO.LOW) # Turn on
GPIO.output(11, GPIO.HIGH) # Turn off
GPIO.output(12, GPIO.LOW) # Turn off
sleep(10) # Sleep for 1 second
GPIO.output(10, GPIO.LOW) # Turn on
GPIO.output(11, GPIO.LOW) # Turn off
GPIO.output(12, GPIO.HIGH) # Turn off
Sleep(120);
```