

# **ASSIGNMENT - 3**

## **PYTHON PROGRAMMING**

<b>ASSIGNMENT DATE</b>	12 OCTOBER,2022
<b>Team ID</b>	PNT2022TMID33873
<b>Project Name</b>	Smartfarmer-IOT Enable Smart farming Application

### **QUESTION 1**

Write python code for Blinking led and traffic lights for Raspberry Pi

#### **CODE:**

#### **BLINKING OF LED ( RGB LED )**

```
import RPi.GPIO as GPIO

from time import sleep

GPIO.setmode(GPIO.BOARD)

GPIO.setup(8,GPIO.OUT)

GPIO.setup(12,GPIO.OUT)

GPIO.setup(10,GPIO.OUT) for
x in range(5):

    GPIO.output(8,True)

    print("RED IS ON")    sleep(2)

    GPIO.output(8,False)

    print("RED IS OFF")

    sleep(2)

    GPIO.output(12,True)

    print("Green IS ON")

    sleep(2)
```

```
GPIO.output(12,False)
print("GREEN IS OFF")
sleep(2)
GPIO.output(10,True)
print("BLUE IS ON")
sleep(2)
GPIO.output(10,False)
print("BLUE IS oFF")
sleep(2)
```

## **TRAFFIC LIGHT**

```
import RPi.GPIO as GPIO
from time import sleep
GPIO.setmode(GPIO.BOARD)
GPIO.setup(7,GPIO.OUT)
GPIO.setup(11,GPIO.OUT)
GPIO.setup(13,GPIO.OUT)
while True:
GPIO.output(7,True)
print("RED is ON")    sleep(3)
    GPIO.output(7,False)
print("RED is OFF")
GPIO.output(11,True)
print("YELLOW is ON")
sleep(1)
GPIO.output(11,False);
print("YELLOW is OFF")
GPIO.output(13,True)
print("GREEN is ON")
sleep(3)
```

```
GPIO.output(13,False)
print("GREEN is OFF")
GPIO.cleanup()
```