

## **ASSIGNMENT - 3**

### **PYTHON PROGRAMMING**

|                            |                  |
|----------------------------|------------------|
| <b>ASSIGNMENT DATE</b>     | 8 OCTOBER,2022   |
| <b>STUDENT NAME</b>        | ABIVIGNESH V     |
| <b>STUDENT ROLL NUMBER</b> | 20TREC401        |
| <b>TEAM ID</b>             | PNT2022TMID29910 |
| <b>MAXIMUM MARKS</b>       | 2 marks          |

### **QUESTION 1**

Write python code for Blinking led and traffic lights for Rasberry 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()
```