

IBM Report (Nalaiya Thiran)

IOT based Smart Farming

SUBMITTED BY

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ASSIGNMENT 3:

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)  
  
GPIO.cleanup()
```

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()
```

