

ASSIGNMENT- 3

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Date	04-11-2022
TeamID	PNT2022TMD17065
Project Name	Smart Farmer- IOT Enabled Smart Farming Application
Maximum Marks	2 Marks

QUESTION- 1:

Write a python code for blinking LED and Traffic lights for Raspberry pi.

Solution :

LED BLINKING:

```
import RPi.GPIO as GPIO from
time import sleep
GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)
while True: # infinite loop
    GPIO.output(8, GPIO.HIGH) # Turn on
    print(""The LED is ON"") sleep(5)
    # Sleep for 5 second GPIO.output(8,
    GPIO.LOW) # Turn off print(""The
    LED is OFF"") sleep(5) # Sleep for 5
    second
```

TRAFFIC LIGHT CODE :

```
from gpiozero import LED
from time import sleep
```

```
red= LED(17) # pin numbers connected to Led&#39;s  
amber=(22) green=(27)
```

```
while True:
```

```
red.on() # RED light print("&quot;Red  
light is ON&quot;") for i in  
range(60,0- 1):  
print("&quot;Remaining time: &quot;,,i)
```

```
sleep(1) red.off() amber.on() #  
AMBER light print("&quot;Yellow  
light is ON&quot;") for i in range(50,-  
1):  
print("&quot;Remaining time: &quot;,,i)  
sleep(1) amber.off() green.on  
# GREEN light print("&quot;Green  
light is ON&quot;") for i in  
range(40,0- 1):  
print("&quot;Remaining time: &quot;,,i)  
sleep(1) green.off()
```