ASSIGNMENT- 3

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Team ID	PNT2022TMID17065
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(5,0,-
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()
```