

ASSIGNMENT-III

Assignment Date	29 September 2022
Student Name	Pavithra P
Student Roll Number	715519106032
Team ID	PNT2022TMID43384
Project Name	Smart Farmer - IoT Enabled Smart Farming Application
Maximum marks	2 marks

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

Code:

1.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
```

2. TRAFFIC LIGHT

```
from gpiozero import LED
```

```
from time import sleep
```

```
red= LED(17)    #pin numbers connected to Led's
```

```
amber=(22)
```

```
green=(27)
```

```
while True:
```

```
    red.on()      #RED light
```

```
    print("Red light is ON")
```

```
    for i in range(60,0,-1):
```

```
        print("Remaining time: ",i)
```

```
        sleep(1)
```

```
    red.off()
```

```
    amber.on()    # AMBER light
```

```
    print("Yellow light is ON")
```

```
    for i in range(5,0,-1):
```

```
        print("Remaining time: ",i)
```

```
        sleep(1)
```

```
    amber.off()
```

```
    green.on      #GREEN light
```

```
    print("Green light is ON")
```

```
    for i in range(40,0,-1):
```

```
        print("Remaining time: ",i)
```

```
        sleep(1)
```

```
    green.off()
```