

SNS COLLEGE OF TECHNOLOGY

SmartFarmer – IoT Enabled Smart Farming Application

ASSIGNMENT 3:

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

NAME : MYTHILI S U

CODE FOR BLINKING LED :

```
import RPi.GPIO as GPIO
import time

#assign numbering for the GPIO using BCM
GPIO.setmode(GPIO.BCM)

#assignn number for the GPIO using Board
#GPIO.setmode(GPIO.BOARD)

cnt = 0

MAIL_CHECK_FREQ = 1 # change LED status every 1 seconds

RED_LED = 4

GPIO.setup(RED_LED, GPIO.OUT)

while True:
    if cnt == 0 :
        GPIO.output(RED_LED, False)
        cnt = 1
    else:
        GPIO.output(RED_LED, True)
```

```
cnt = 0
time.sleep(MAIL_CHECK_FREQ)
GPIO.cleanup()
```

CODE FOR TRAFFIC LIGHTS:

```
from gpiozero import LED
red = LED(22)
red.blink()
```

```
from gpiozero import LED
red = LED(22)
amber = LED(27)
green = LED(17)
```

```
red.blink(1, 1)
amber.blink(2, 2)
green.blink(3, 3)
```

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

```
red = LED(22)
amber = LED(27)
green = LED(17)
```

```
red.on()
```

sleep(1)
amber.on()
sleep(1)
green.on()
sleep(1)
red.on()
sleep(1)
amber.on()
sleep(1)
green.on()
sleep(1)
red.off()
sleep(1)
amber.off()
sleep(1)
green.off()

while True:
 red.on()
 sleep(1)
 amber.on()
 sleep(1)
 green.on()
 sleep(1)
 red.off()
 sleep(1)

amber.off()

sleep(1)

green.off()