PSNA COLLEGE OF ENGINEERING AND TECHNOLOGY, DINDIGUL

<u>Department of Electronics and Communigcation</u> <u>Engineering</u>

ASSIGNMENT 3

NalayaThiran IOT Domain : IOT Enabled Smart waste management system for metropolitan cities

Topic: Python code for blinking LED and traffic lights for

Raspberry pi

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Python Code:

Import RPi.GPIO as GPIO

Import time

Try:

Def lightTraffic(led1, led2, led3, delay):

GPIO.output(led1, 1)

Time.sleep(delay)

GPIO.output(led1, 0)

GPIO.output(led2, 1)

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Time.sleep(delay)
GPIO.output(led2, 0)
GPIO.output(led3, 1)
Time.sleep(delay)
GPIO.output(led3, 0)
GPIO.setmode(GPIO.BCM)
Button = 19
GPIO.setup(button, GPIO.IN, pull_up_down=GPIO.PUD_UP)
ledGreen = 16
ledYellow = 12
ledRed = 23
GPIO.setup(ledGreen, GPIO.OUT)
GPIO.setup(ledYellow, GPIO.OUT)
GPIO.setup(ledRed, GPIO.OUT)
While True:
Input state = GPIO.input(button)
If input state == False:
Print('Button Pressed')
lightTraffic(ledGreen, ledYellow, ledRed, 1)
else:
GPIO.output(ledGreen, 0)
GPIO.output(ledYellow, 0)
GPIO.output(ledRed, 0)
Except KeyboardInterrupt:
```

Print "You've exited the program"

Finally: GPIO.cleanup()