

ASSIGNMENT 3

Name: Prasanna Bharathi J

(Team leader)

Write Python Code for Blinking LED and Traffic Lights for Raspberry pi

LED Blinking Python Code

```
import RPi.GPIO as GPIO

import time

ledPin = 22

def setup():

    GPIO.setmode(GPIO.BOARD)

    GPIO.setup(ledPin, GPIO.OUT)

    GPIO.output(ledPin, GPIO.LOW)

def loop():

    while True:

        print 'LED on'

        GPIO.output(ledPin, GPIO.HIGH)
```

```
        time.sleep(1.0)

        print 'LED off'

        GPIO.output(ledPin, GPIO.LOW)

        time.sleep(1.0)

def endprogram():

    GPIO.output(ledPin, GPIO.LOW)

    GPIO.cleanup()

if __name__ == '__main__':

    setup()

    try:

        loop()

    except KeyboardInterrupt:

        endprogram()
```

Traffic Light Python Code

```
from gpiozero import LED

from time import sleep

red=LED(17)

yellow=LED(22)

green=LED(27)

While True:

    red.on()

    sleep(15)
```

red.off()

sleep(1)

yellow.on()

sleep(10)

yellow.off()

sleep(1)

green.on()

sleep(10)

green.off()

sleep(1)