ASSIGNMENT 3

Submitted by:

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Write a Python code for Blinking LED and Traffic Light for Raspberry Pi

Solution:

Blinking Of an LED For Raspberry Pi

```
import RPi.GPIO as GPIO import time

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

ifcnt == 0 : GPIO.output(RED_LED, False)
cnt = 1

else: GPIO.output(RED_LED, True) cnt = 0


time.sleep(MAIL_CHECK_FREQ)
GPIO.cleanup()
```

TRAFFIC LIGHT FOR RASBERRY PI

```
import RPi.GPIO as GPIO
import time
import signal
import sys

# Setup
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)



# Turn off all lights when user ends demo def
allLightsOff(signal, frame):
        GPIO.output(9, False)
        GPIO.output(10, False)
        GPIO.output(11, False)
        GPIO.cleanup() sys.exit(0)

signal.signal(signal.SIGINT, allLightsOff)


# Loop forever
while True:
        # Red

        GPIO.output(9, True)
        time.sleep(3)

        # Red and amber
        GPIO.output(10, True)
        time.sleep(1)

        # Green GPIO.output(9,
        False)

        GPIO.output(10, False)
        GPIO.output(11, True)
        time.sleep(5)

        # Amber GPIO.output(11,
        False) GPIO.output(10,
        True) time.sleep(2)

        # Amber off (red comes on at top of loop)
        GPIO.output(10, False)
```