ASSIGMNENT-III

Assignment Date	07 October 2022
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QUESTION:

Write python code for blinking LED and traffic light for Raspberry pi.

PYTHON CODE FOR BLINKING LED:

```
import RPi.GPIO as
GPIO import time
GPIO.setmode(GPIO.B
CM) cnt = 0
MAIL_CHECK_FREQ = 1
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_F
 REQ) GPIO.cleanup()
```

PYTHON CODE FOR TRAFFIC LIGHT:

```
 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)
time.sleep(delay)
GPIO.output(led2
, 0)
```

```
GPIO.output(led3, 1)
time.sleep(delay)
GPIO.output(led3, 0)
GPIO.setmode(GPIO.BC
M) 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(ledRe
        d, 0) except
        KeyboardInterrupt:
        print
  "You've exited the
  program" finally:
  GPIO.cleanup()
```