IBM
ASSIGNMENT – 3

Python Programming

Assignment Date	06 October 2022
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Write python code for blinking LED and Traffic lights for Raspberry Pi.

CODE FOR BLINKING LED:

```
import RPi.GPIO as GPIO

import time

GPIO.seimode(GPIO.BCM)

cnt = 0

MAIL CHECK FREQ = 1 # change LED staius every 1 seconds

RED LED = 4

GPIO.setup(RED LED, GPIO.OUT)

while True:

ifcnt == 0 :

GPIO.output(RED LED, False)

cnt =

else:
```

```
GPIO.output(RED LED, True)
cnt   0


time.sleep(MAIL CHECK FREQ} GPIO.cleanup()
```

CODE FOR TRAFFIC LIGHTS:

```
from gp iozero import Button, TrafficLig hts,
Buzzer from time import s leep


buzzer = Buzzer(15)
button = B utton(21)
ligits = TrafficLig its(25, 8, 7}

while True.
        button. wait for press()
        buzzer.on()
        light. green.on()
        sleep(1 }
        lights.amber. on()

        sleep(1 }
        lights. red.on()
```

```python
from gpiozero import Button, TrafficLights,
Buzzer from time import sleep

buzzer = Buzzer(15)
button = Button(21)
lights = TrafficLights(25, 8, 7)

while True.
        button.wait for press()
        buzzer.on ()
        light. green.on()
        sleep(1 }
        lights.amber. on()
        sleep(1 }
        lights. red.on()




        sleep(1 }
        lights.off()
        buzzer.off()
```