

IBM Project Assignment 3

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Maximum Marks	2 Marks

Question:

Write python code for blinking LED and Traffic lights for Raspberry pi.(only python code).

Python code for blinking LED:

```
import RPi.GPIO as GP from
```

```
time import sleep
```

```
GP.setwarnings(False)
```

```
GP.setmode(GP.BOARD)
```

```
GP.setup(8,GP.OUT,initial=GP.LOW)
```

```
while True:          #infinite loop
```

```
GP.output(8, GPIO.HIGH)      # Turn on
```

```
print("The LED is ON")
```

```
    sleep(2)          # Sleep for 2 second
```

```
    GP.output(8, GPIO.LOW)    # Turn off
```

```
print("The LED is OFF")
```

```
    sleep(2)          # Sleep for 2 second
```

Python code for Traffic lights:

```
from gpiozero import LED from  
time import sleep
```

```
red= LED(17)          #pin numbers connected to Led's  
aster=(22) green=(27)
```

```
while True:
```

```
    red.on()          #RED LIGHT
```

```
    print("Red light is ON")    for
```

```
i in range(100,0,-1):
```

```
    print("Remaining time: ",i)
```

```
        sleep(1)
```

```
    red.off()
```

```
    aster.on()        # ASTER LIGHT
```

```
    print("Yellow light is ON")    for i in
```

```
range(5,0,-1):
```

```
        print("Remaining time: ",i)
```

```
        sleep(1)
```

```
    aster.off()
```

```
    green.on          #GREEN LIGHT
```

```
    print("Green light is ON")    for i in
```

```
range(30,0,-1):
```

```
        print("Remaining time: ",i)
```

```
        sleep(1)
```

```
    green.off()
```