

Assignment -3
Python Programming

Assignment Date	16 october 2022
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Maximum Marks	2 Marks

Question-1:

LED blinking code

Solution:

```
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
```

Question 2:**TRAFFIC LIGHT RASBERRY PYTHON CODE****Solution:**

```
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()
```