

Assignment -3

Assignment Date	07 October 2022
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Student Roll Number	611219106051
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()
```