

Assignment -3

Assignment Date	05 October 2022
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Question-1 :

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

Solution :

LED BLINKING CODE

```
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
```

TRAFFIC LIGHT RASBERRY PYTHON CODE

```
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 is: ",i)
```

```
        Sleep(1)
```

```
    Red.off()
```

```
Aster.on() # ASTER light
```

```
Print("YELLOW LIGHT IS ON")
```

```
For I in range(5,0,-1):
```

```
Print("Remaining time is: ",i)
```

```
Sleep(1)
```

```
Aster.off()
```

```
Green.on #GREEN light
```

```
Print("GREEN LIGHT IS ON")
```

```
For I in range(30,0,-1):
```

```
Print("Remaining time is: ",i)
```

```
Sleep(1)
```

```
Green.off()
```