

### Assignment -3

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|---------------------|----------------|
| Assignment Date     | 5 October 2022 |
| Student Name        | NIVETHITHA P   |
| Student Roll Number | 111519104093   |
| Maximum Marks       | 2 Marks        |

#### Question-1:

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

#### Solution :

#LED BLINKING :

```
import RPi.GPIO as GPIO
from time import sleep

GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)
GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW)

while True:          #infinite loop
    GPIO.output(8, GPIO.HIGH)      # Turn on
    print("The LED is ON")
    sleep(5)          # Sleep for 5 second

    GPIO.output(8, GPIO.LOW)       # Turn off
    print("The LED is OFF")
    sleep(5)          # Sleep for 5 second
```

#TRAFFIC LIGHT CODE :

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

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

```
while True:
    red.on()       #RED light
    print("Red light is ON")
    for i in range(60,0,-1):
        print("Remaining time: ",i)
```

```
    sleep(1)
red.off()
```

```
amber.on()          # AMBER light
print("Yellow light is ON")
for i in range(5,0,-1):
    print("Remaining time: ",i)
    sleep(1)
amber.off()
```

```
green.on            #GREEN light
print("Green light is ON")
for i in range(40,0,-1):
    print("Remaining time: ",i)
    sleep(1)
green.off()
```