## **Assignment -3**

**Python Programming** 

## Question-1:

Write a python code for led blinking in raspberry pi

#### **SOLUTION:**

Import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library

from time import sleep # Import the sleep function from the time module

GPIO.setwarnings(False) # Ignore warning for now

GPIO.setmode(GPIO.BOARD) # Use physical pin numbering

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an output pin and set initial value to low (off)

while True: # Run forever

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

sleep(1) # Sleep for 1 second

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

sleep(1) # Sleep for 1 second

```
input BFI.GFIO as GFIO # Import Baspberry Pi GFIO library
from time import sleep # Import the sleep function from the time module

spon_sermannings(raise) # Import warming for now
seldo_sermande(seldo_scame) # two physical pin numbering
GFIO.sermy(0, GFIO.OFF, initial=GFIO.LOW) # Set pin 0 to be an output pin and set initial value to low (off)

while True: # Fan Econver
GFIO.output(0, GFIO.HIOR) # Turn on
sleep(1) # Sleep For 1 second

spon_output(0, GFIO.LOW) # Turn off
sleep(1) # zleep For 1 second
```

### Question-2:

Write a python code for traffic light in raspberry pi

**SOLUTION:** 

# from gpiozero import Button, TrafficLights, Buzzer

```
from time import sleep
```

```
buzzer = Buzzer(15)
button = Button(21)
lights = TrafficLights(25, 8, 7)

while True:
    button.wait_for_press()
    buzzer.on()
    light.green.on()
    sleep(1)
    lights.amber.on()
    sleep(1)
    lights.red.on()
    sleep(1)
    lights.off()
    buzzer.off()
```

```
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from time import misep

busines = Busines(15)

Button = Button(21)

lights = Fueffickights(25, 0, 7)

while from:

Dutton.weit_for_press()

Dutton.weit_for_press()

Dutton.weit_for_press()

Dutton.on()

lights.qurem.on()

slemp(1)

lights.amber.on()

sleep(1)

lights.red.on()

sleep(1)

lights.red.on()

sleep(1)

lights.of()

lights.of()

lights.of()

lights.of()

lights.of()

lights.of()
```