**ASSIGNMENT – 3**

**CODE FOR LED BLINK**

```
import RPi.GPIO as GPIO # RPi.GPIO can be referred as GPIO from now
import time
ledPin = 22
def setup():
      GPIO.setmode(GPIO.BOARD)        # GPIO Numbering of Pins
      GPIO.setup(ledPin, GPIO.OUT)     # Set ledPin as output
      GPIO.output(ledPin, GPIO.LOW)   #Set ledPin to LOW to turn Off the LED
def loop():
     while True:
           Print 'LED on'
           GPIO.output(ledPin, GPIO.HIGH)
           time.sleep(1.0)
           print 'LED off'
           GPIO.output(ledPin, GPIO.LOW)
           time.sleep(1.0)
def endprogram():

          GPIO.output(ledPin, GPIO.LOW)
          GPIO.cleanup()                #Releaseresources

if_name_=='_main_':                 #Programstartsfromhere
setup()
try:
       loop()
except KeyboardInterrupt:    #When 'Ctrl+C' is pressed, the destroy() will be executed.
       endprogram()
```

## CODE FOR TRAFFIC LIGHT

```
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()
```