

# ASSIGNMENT 3

## 1. Write a python code for blinking led

```
import RPi.GPIO as GPIO #import Raspberry PI 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 led
    sleep(1) # Sleep for 1 second
    GPIO.output(8, GPIO.LOW) # Turn off led
    sleep(1) # Sleep for 1 second
```

## 2. Write a python code for traffic lights

```
from gpiozero import Button, TrafficLights #import the libraries
from time import sleep # Import the sleep function from the time module

button = Button(21) #Set pin 21 for button
lights = TrafficLights(25, 8, 7) #Set pin 25,8,7 for red, yellow and green led

while True:
    button.wait_for_press() #wait for button to be pressed
    light.green.on() #Turn on green led
    sleep(1) # Sleep for 1 second
    lights.amber.on() # Turn on green led
    sleep(1) # Sleep for 1 second
    lights.red.on() #Turn on red led
    sleep(1) # Sleep for 1 second
    lights.off() #turn of lights
```