ASSIGNMENT - 3

Blinking LED - Python Code for Raspberry Pi

import RPi.GPIO as GPIO # Importing Raspberry Pi GPIO library

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

GPIO.setwarnings(False) # Ignoring the warning

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

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

while True: # Run forever

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

    sleep(1) # Sleep for 1 second

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

    sleep(1) # Sleep for 1 second

Traffic Light Simulation - Python Code for Raspberry Pi

```
from gpiozero import LED # Importing LED object from gpiozero module
from time import sleep # Importing sleep function from time module

red = LED(17) # Setting pin 17 for red led
amber = LED(22) # Setting pin 22 for amber led
green = LED(27) # Setting pin 27 for green led

while True:
    red.on() # Turning on Red Signal
    sleep(90) # Red stays for 90 Seconds
    red.off() # Turning off Red Signal
    amber.on() # Turning on Amber Signal
    sleep(5) # Amber stays for 5 Seconds
    amber.off() # Turning off Amber Signal
    green.on() # Turning on Green Signal
    sleep(30) # Green stays for 30 Seconds
    green.off() # Turning off Green Signal
```