**CO326 - Industrial Networks**

**Lab 01 - Serial Port I/O**

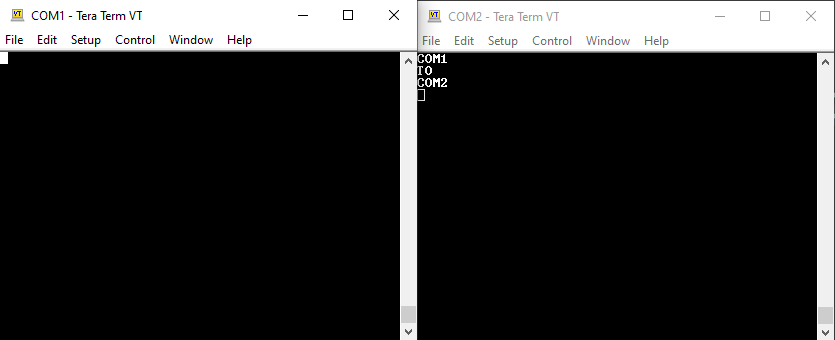
**03/03/2023**

**E/18/077 – Dharmarathne N.S. , E/18/227 Mudalige D.H.**

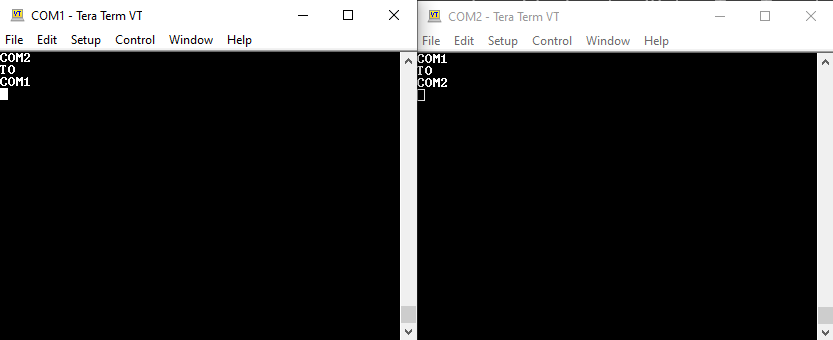
# Part 1

1. Serial data (text) transfer between two virtual ports with two Tera Term terminals.

COM1 to COM2

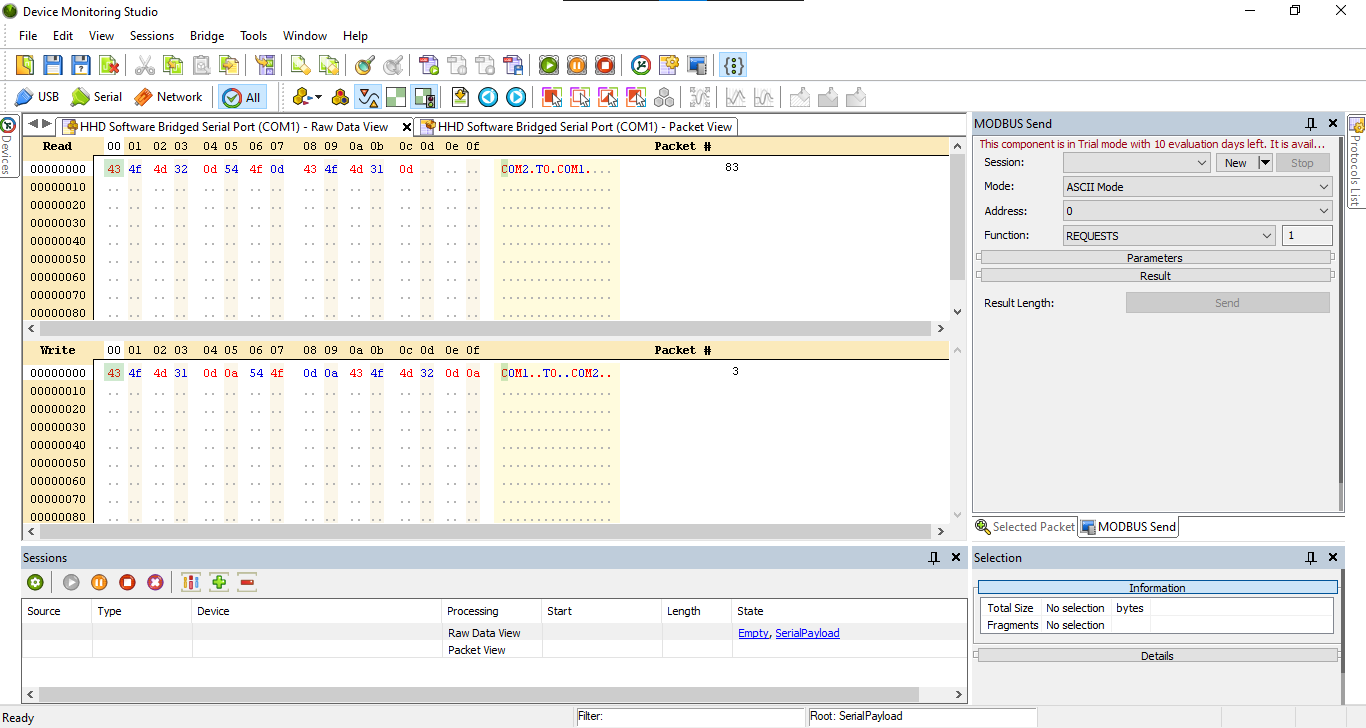


COM2 to COM1



1. Output of the monitoring tool when the above data transferring occurs.

Raw Data View



Packet View

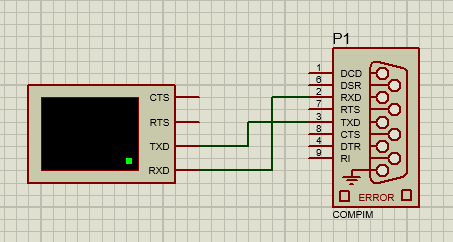
Graphical user interface, application

Description automatically generated

# Part 2

I. The proteus setup

Before the simulation



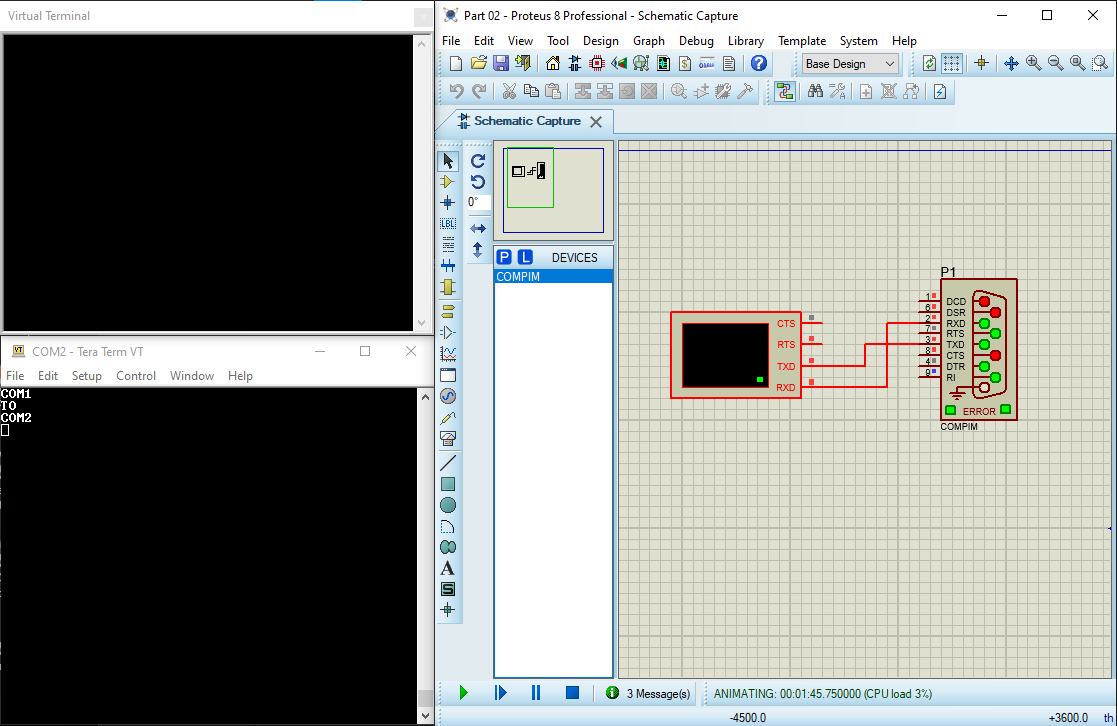
After the simulation

Chart, diagram, schematic

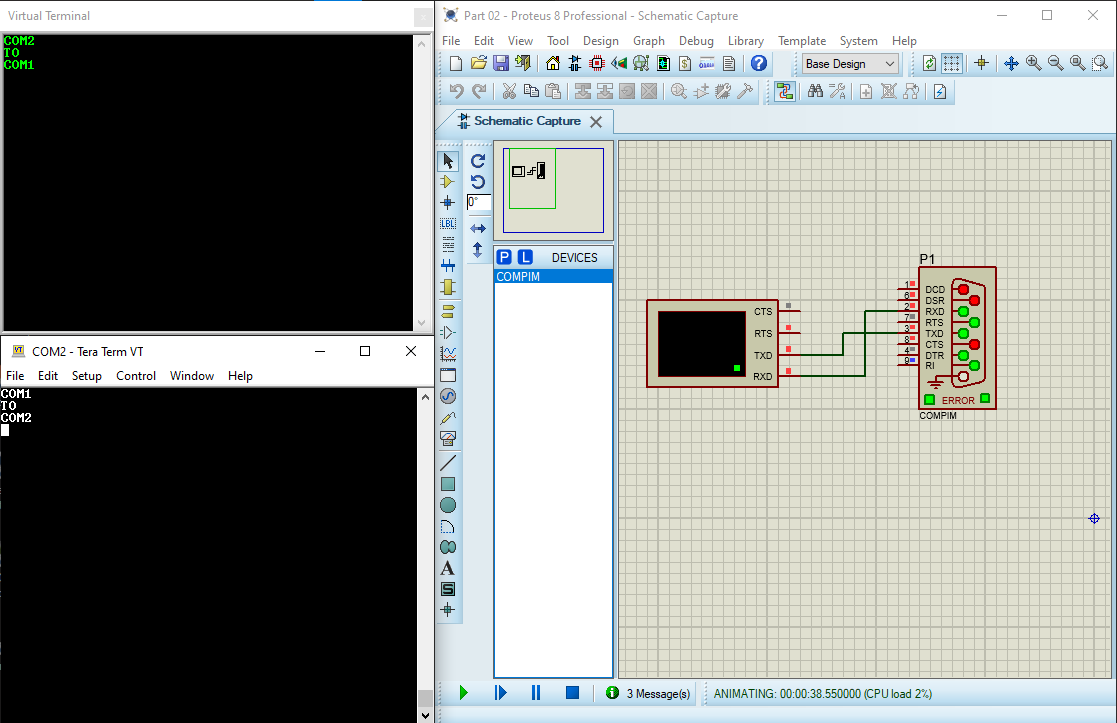
Description automatically generated

II. Serial data (text) transfer between two virtual ports performed with Tera Term terminal and virtual terminal in Proteus.

COM1 to COM2



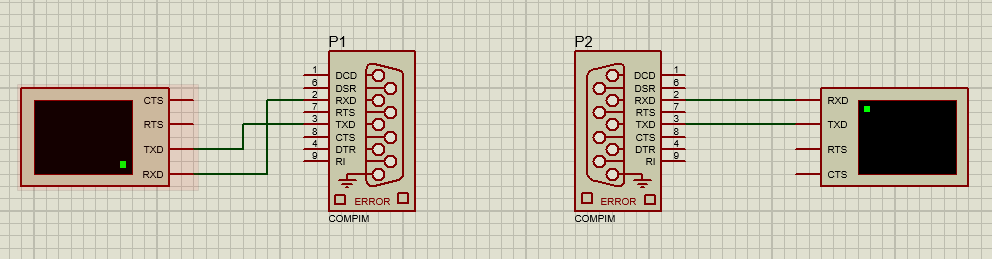
COM2 to COM1



# Part 3

I. The proteus setup

Before the simulation

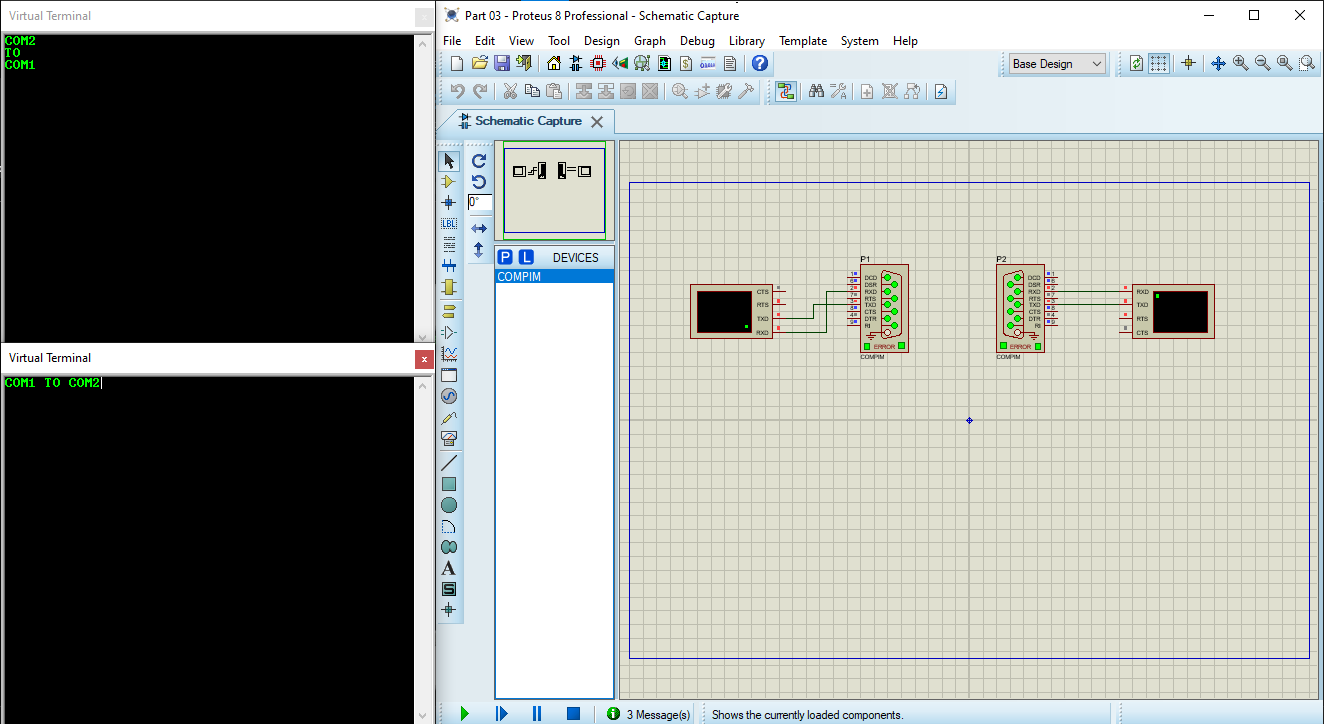


After the simulation

Diagram

Description automatically generated

II. Serial data (text) transfer between two virtual ports performed with two virtual terminals in Proteus.



# Part 4

I. The proteus setup

Diagram, schematic

Description automatically generated

II. The proteus setup all stages LEDs (lighting, not lighting)

1. Lighting Red LED

A picture containing graphical user interface

Description automatically generated

1. Lighting Yellow LED

A picture containing diagram

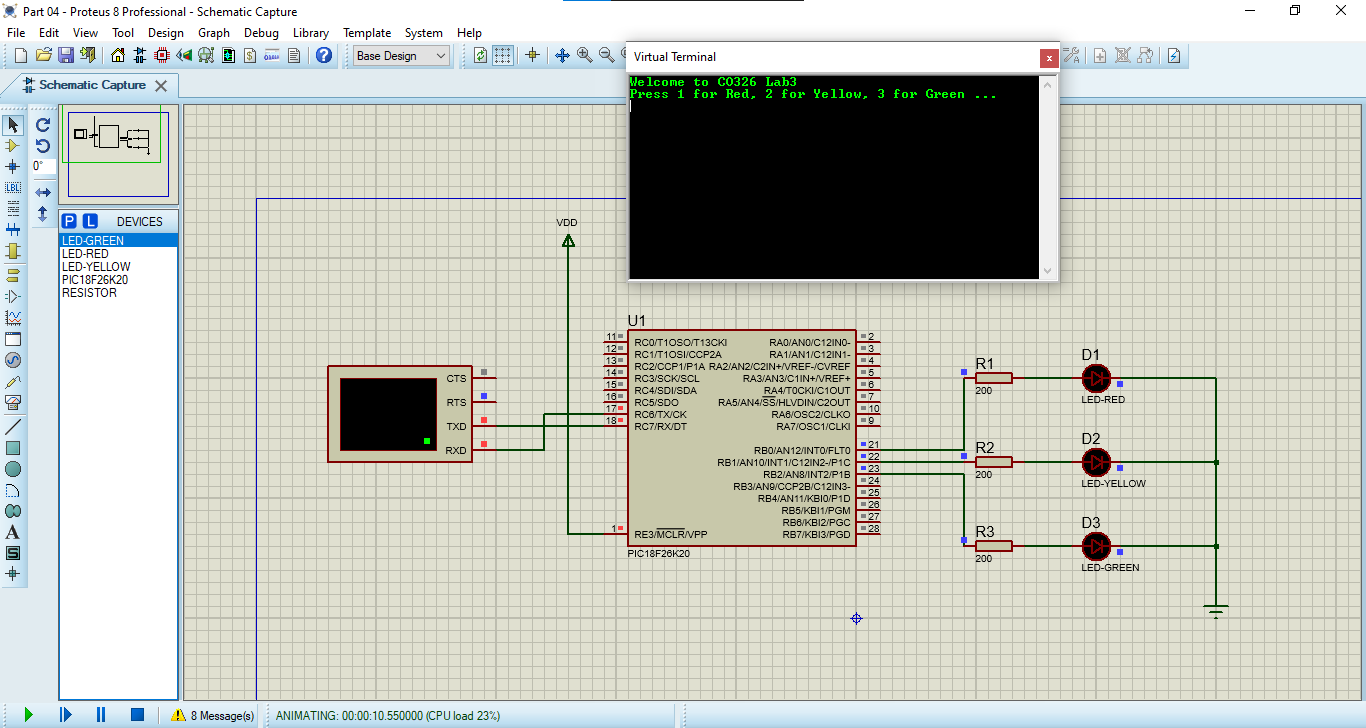
Description automatically generated

1. Lighting Green LED

A picture containing schematic

Description automatically generated

1. All LEDs are off



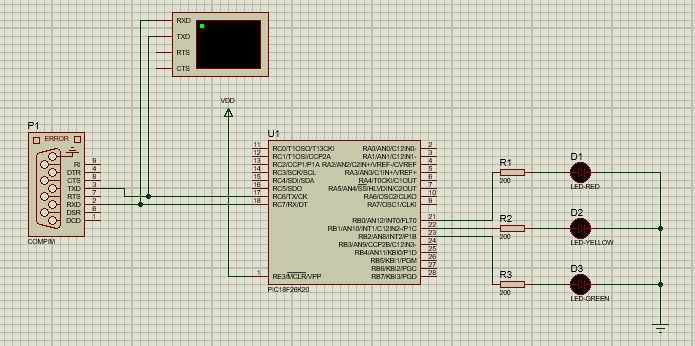
1. All LEDs are on

A picture containing graphical user interface

Description automatically generated

# Part 5

I. The proteus setup



II. Serial data (text) transfer between two virtual ports performed with Tera Term terminal and virtual terminal in Proteus for all stages of LEDs.

1. Lighting Red LED

A picture containing chart

Description automatically generated

1. Lighting Yellow LED

Graphical user interface

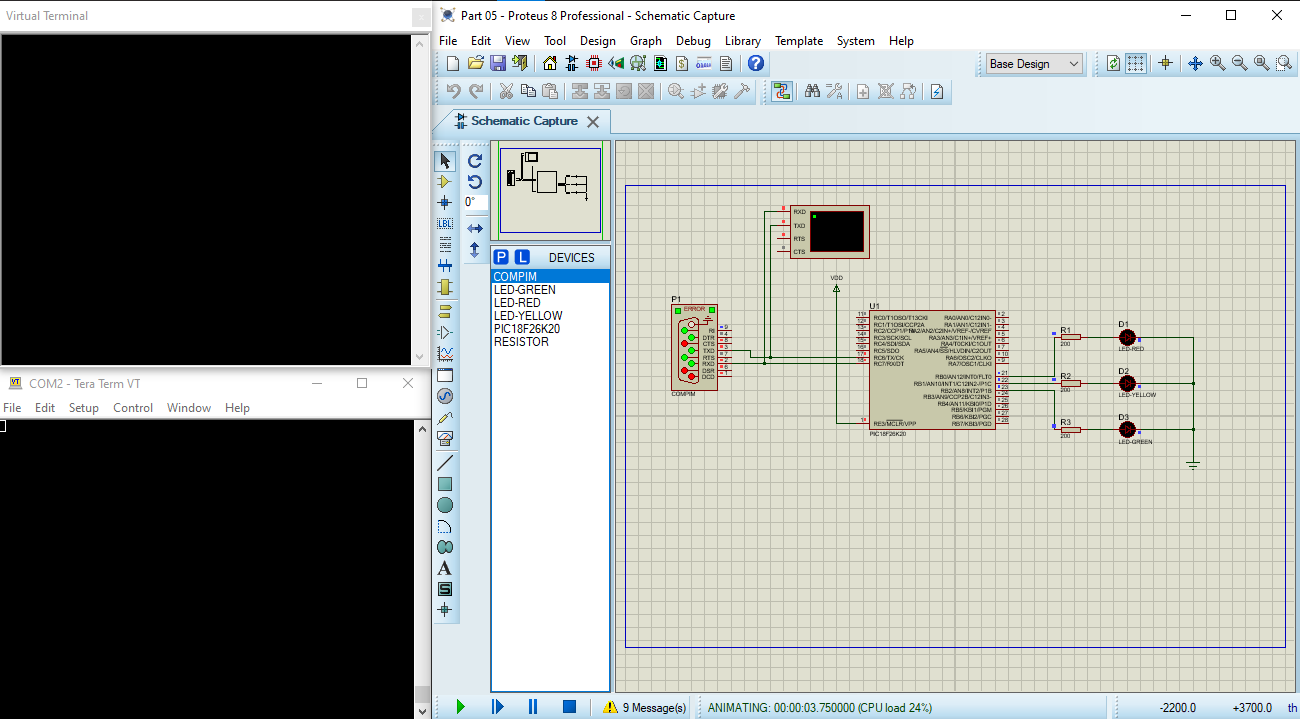
Description automatically generated with medium confidence

1. Lighting Green LED

Schematic

Description automatically generated with low confidence

1. All LEDs are off



1. All LEDs are on

A picture containing graphical user interface

Description automatically generated