

CO326 - Lab 01

Lab 01A - Serial Port I/O

PART 01: ESTABLISHING AND TESTING A VIRTUAL RS232 SERIAL PORT CONNECTION WITH THE HELP OF THIRD-PARTY TOOLS

I. SCREENSHOTS OF SERIAL DATA (TEXT) TRANSFER BETWEEN TWO VIRTUAL PORTS WITH TWO TERA TERM TERMINALS.

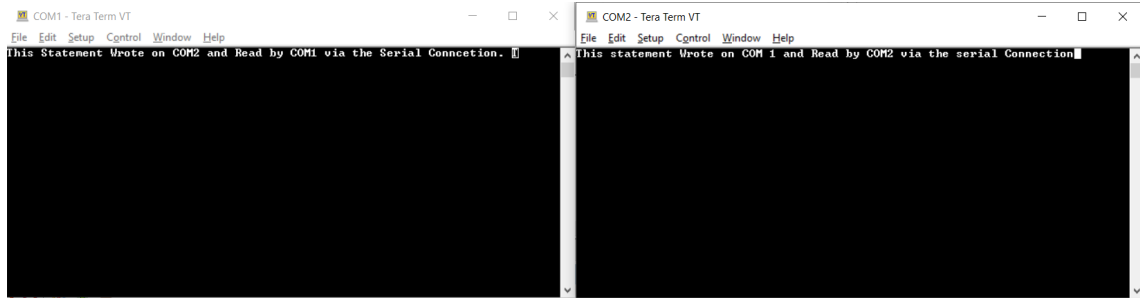


FIGURE 1 : COM1 & COM2 Serial Port Terminals

II. OUTPUT OF THE MONITORING TOOL WHEN THE ABOVE DATA TRANSFERING OCCURS

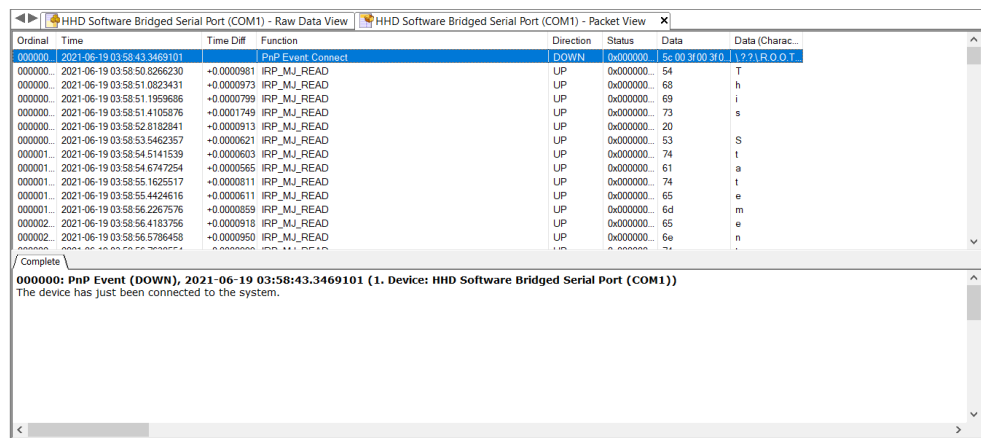


FIGURE 2 : COM1 Serial Port Read and Write Operation on Packet View

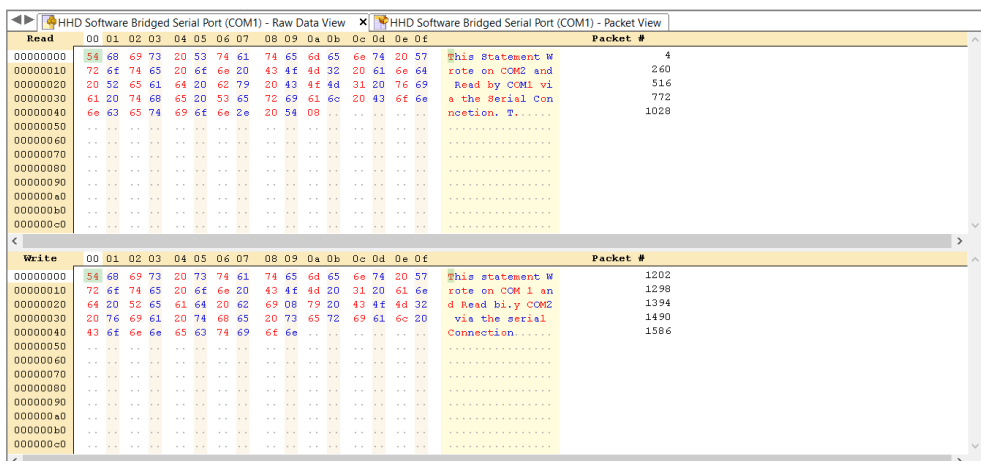


FIGURE 3 : COM1 Serial Port Read and Write Operation on Raw Data View

PART 02: USING “PROTEUS” TO SIMULATE ONE SERIAL PORT

I. SCREENSHOTS OF THE PROTEUS SETUP

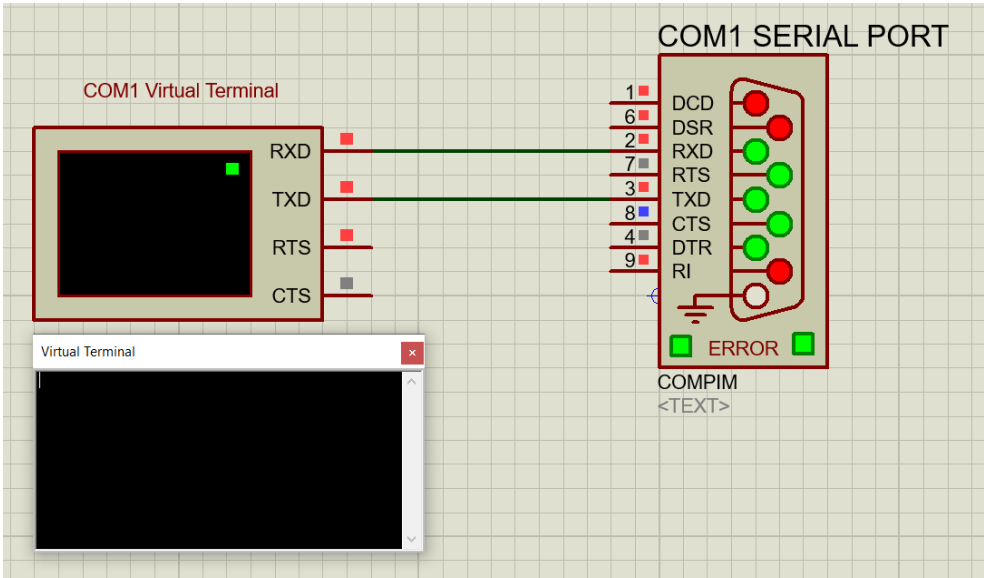


FIGURE 4 : COM1 Proteus Setup on Simulation Mode

II. SERIAL DATA (TEXT) TRANSFER BETWEEN TWO VIRTUAL PORTS PERFORMED WITH TERA TERM TERMINAL AND VIRTUAL TERMINAL IN PROTEUS

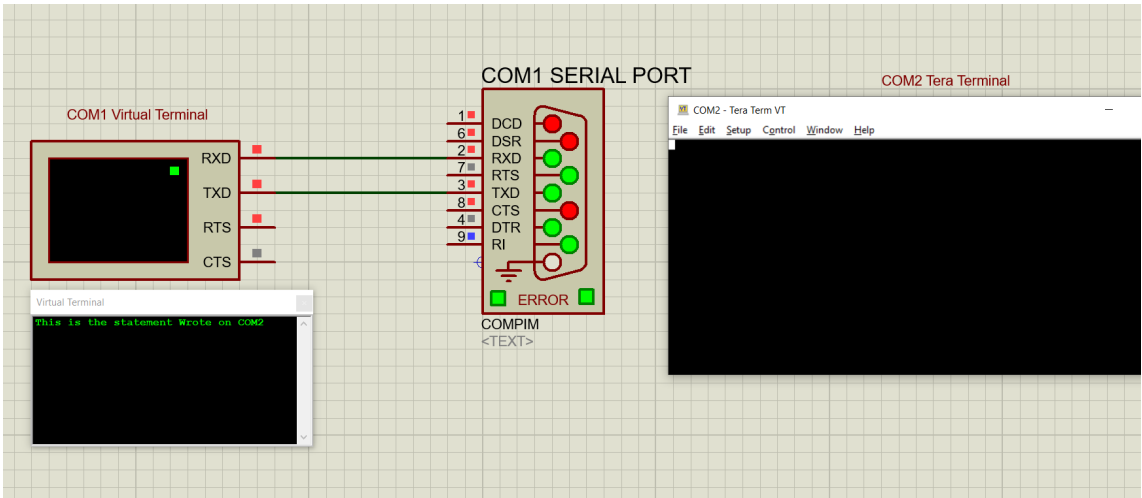


FIGURE 5 : From COM2 Tera Terminal Inputs to COM1 Virtual Terminal

PART 03: USING “PROTEUS” TO SIMULATE BOTH THE SERIAL PORTS

I. SCREENSHOTS OF THE PROTEUS SETUP

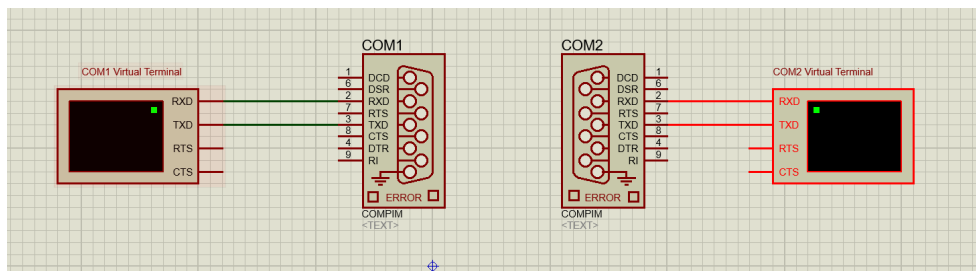


FIGURE 6 : COM1 & COM2 Proteus Setup

II. SERIAL DATA (TEXT) TRANSFER BETWEEN TWO VIRTUAL PORTS PERFORMED WITH TERA TERM TERMINAL AND VIRTUAL TERMINAL IN PROTEUS

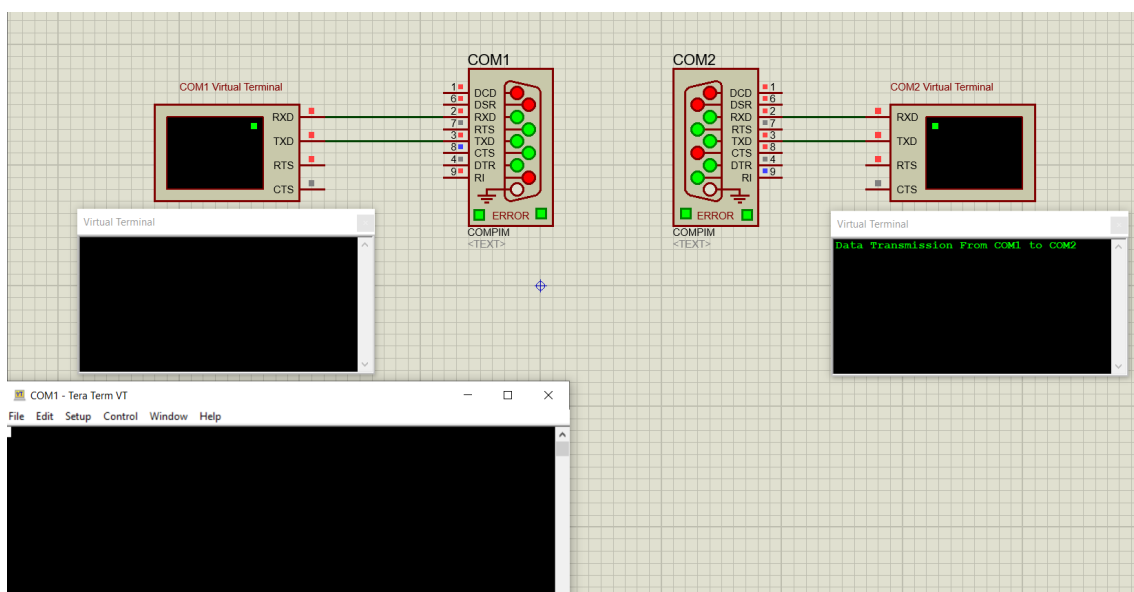


FIGURE 7 : From COM1 Tera Terminal inputs to COM2 Virtual Terminal

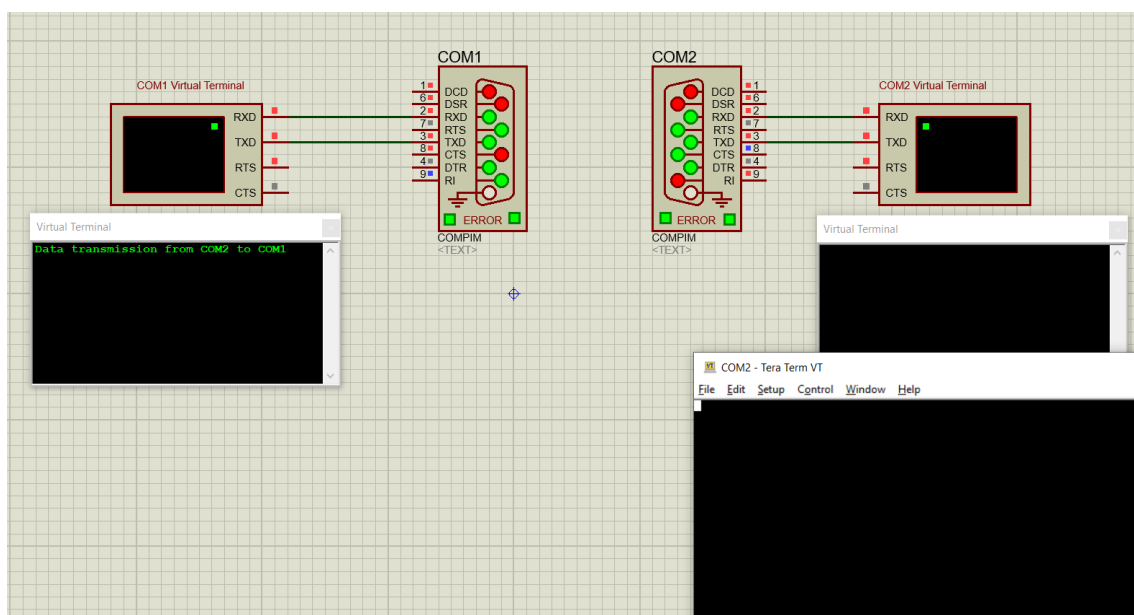


FIGURE 8 : From COM2 Tera Terminal inputs to COM1 Virtual Terminal

ADDITIONAL FINDINGS

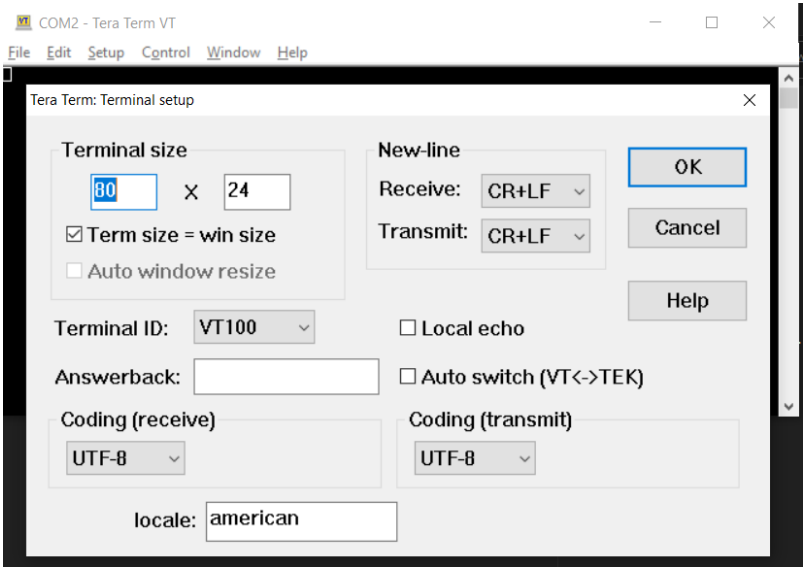


FIGURE 9 :Initially tera term terminal settings new line method only carriage return CR. After Configure it to CR+LF after pressing enter cursor moves to the initial position of the same line with moves to the following line

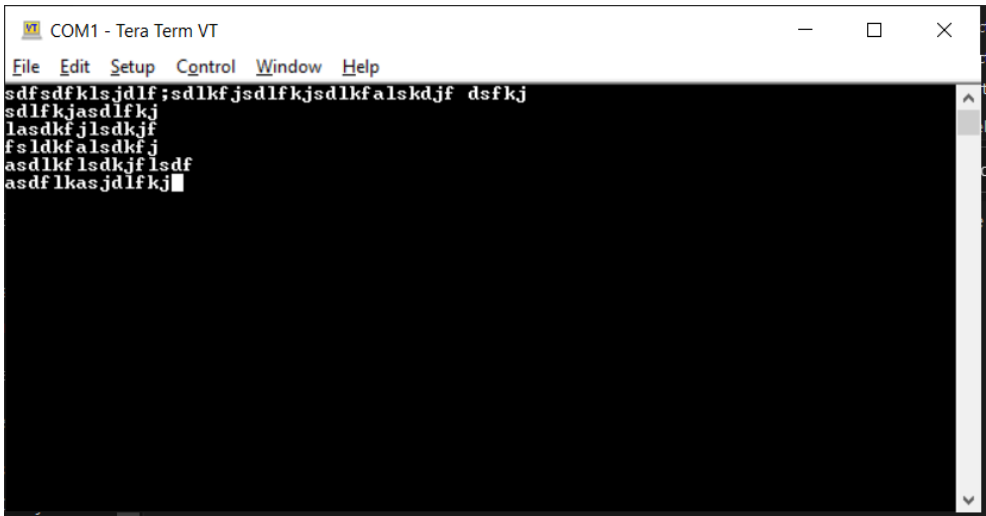


FIGURE 10 :New line method updated to Carriage Return (CR) plus Line Following (LF)