_readme_testterm.odt wmh 2020-11-18: terminal for sending scripted text strings

testterm.exe is a custom serial terminal whose only functions are to read a test script such as the example 'testscript_demo.txt' in this directory, to display instructions to the test operator, to send ASCII strings over the serial port, and to display any data received back from the serial port.

Before starting testterm.exe the COM port must be identified. The COM port identification can be discovered by typing 'mode' at the Windows 'cmd' prompt or looking in device manager.

Starting testterm example: if the COM port is COM3 then a test can be started typing

      testterm COM3 testscript_demo.txt

at the prompt.

If everything goes well a sequence of messages will appear:

      Starting testterm.exe
      See '_readme_testterm' and 'test_script_demo.txt' for more info
      Attempting connection to target on \\.\COM3; testing with testscript_demo.txt
      serial port \\.\COM3 is ready
      serial parameter settings successful
          Baudrate = 115200
          ByteSize = 8
          StopBits = 0
          Parity = 0
      Serial timeout settings successful

      Script information messages starting with '#' will display one line at a time
      Hit 'Enter' to advance to each next message or command operation
      Beginning test script 'testscript_demo.txt'

and at this point the script will begin to be displayed.

Looking at the script format, there are only two types of text-lines in it: those which start with '#' and those which don't. Everything that starts with '#' will be displayed to the test operator as instructions or information. Everything that does not start with '#' will be sent out the serial port.

Important '*feature*' note: this preliminary version of testterm does not have the ability to receive asynchronous messages from the target device. It only 'listens' for responses to commands for a limited period of time after the command is sent, then goes back to waiting for test operator inputs.

      In order to avoid disrupting operation of testterm you <u>must</u> wait for the 'bytes received' message before proceeding with the next step in the script.

Note: testterm.exe is hardcoded to 115200 baud.