MICS AY23 Lab 08 Completion

Please follow the directions here and answer the questions and upload screen shots.
https://docs.google.com/document/d/1bkuuYW9AxE_Rc4El27nO1psgCA9KDoNUedRn-JhzqJc/edit#

1. Email *

2. Describe the difference between how the current lab setup using RS-485 serial is different form the RS-232 version we used during Lab 07. (aim for > 200 words) 5 points

3. Were you able to collect (or obtain) data from the RS-485 USB adapter that shows different Modbus RTU messages passing between the PLCs? 3 points

Mark only one oval.

- ◯ Yes
- ◯ No

4. Were you able to open that log data file in a hex editor? 3 points

Mark only one oval.

- Yes
- No

5. Cut and paste the content of one of the kinds messages that changes based on the switch inputs and you were able to parse and describe each of its parts. 5 points

6. Were you able to download and run the ModScan64 program? 3 points

Mark only one oval.

- Yes
- No

7. Were you send and read data to the PLCs using the ModScan64 program? 3 points

Mark only one oval.

- Yes
- No

8. Describe what this means in terms of the default security of ICS processes that are regulated via Modbus messages. (aim for > 200 words) 5 points

9. Were you able to setup your PLC as a Modbus TCP server? 3 points

Mark only one oval.

- Yes
- No

10. Were you create a PLC program that let you read discrete input values from another PLC? 3 points

Mark only one oval.

- Yes
- No

11. Upload a screenshot of your Ladder Logic diagram showing at least one MSG_MODBUS2 block. 3 points

Files submitted:

12. Upload a screenshot(s) of your local (or global) variables showing the settings you used to read or write values form a remote PLC using Modbus TCP. 3 points

Files submitted:

13. Were you capture Wireshark data of your computer sending (and/or receiving) Modbus TCP messages? 3 points

Mark only one oval.

- ◯ Yes
- ◯ No

14. Upload a screenshot(s) of your Wireshark packet capture. 3 points

Files submitted:

15. Describe here the contents of the message shown in the previous screenshot(s). Do you best to find the values in the hex/binary messages. And describe why this makes sense for what you were doing with the ModScan64 program. 5 points

16. Are there any issues or improvements you can suggest for this lab?