Wireshark Question

1. Capture TCP Packets and:
   a) Analyze the three-way handshake during the establishment of the communication.
   b) Identify if there are any retransmitted segments.

Socket Programming

1. Build a client-server system with 2 clients to implement the Calculator
   ● Client receives inputs (2 operands & 1 Operator) from the user and sends them to the server
   ● Server does the mathematical operation and sends the result back to the client
   ● Client displays the "Result"

2. Build a client-server system to check the validity of a password. The client receives the password from the user and sends it to the Server for validation. After password validation, the Server responds to the Client with appropriate messages. Condition for password validation
   ● Minimum 8 characters and Maximum 20 characters.
   ● The alphabet must be between [a-z]
   ● At least one alphabet should be of Upper Case [A-Z]
   ● At least 1 number or digit between [0-9]
   ● At least 1 character from [_ or @ or $]