

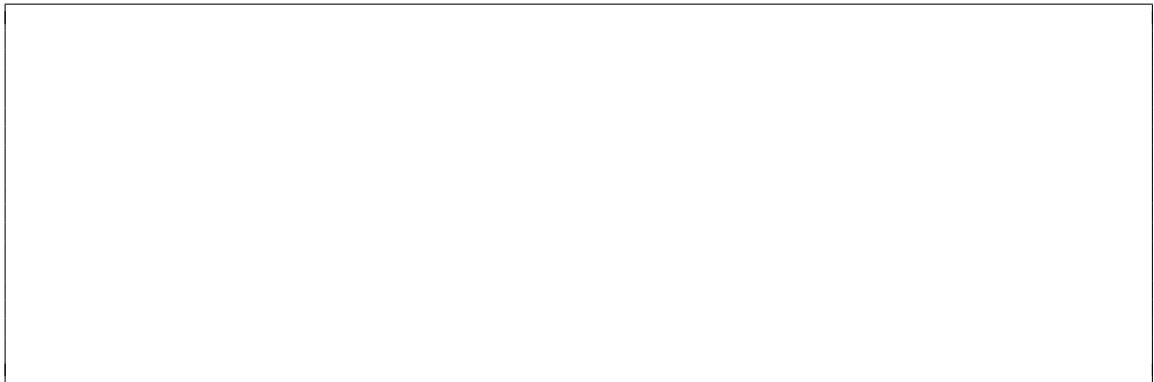
# Theoretical Questions on Email

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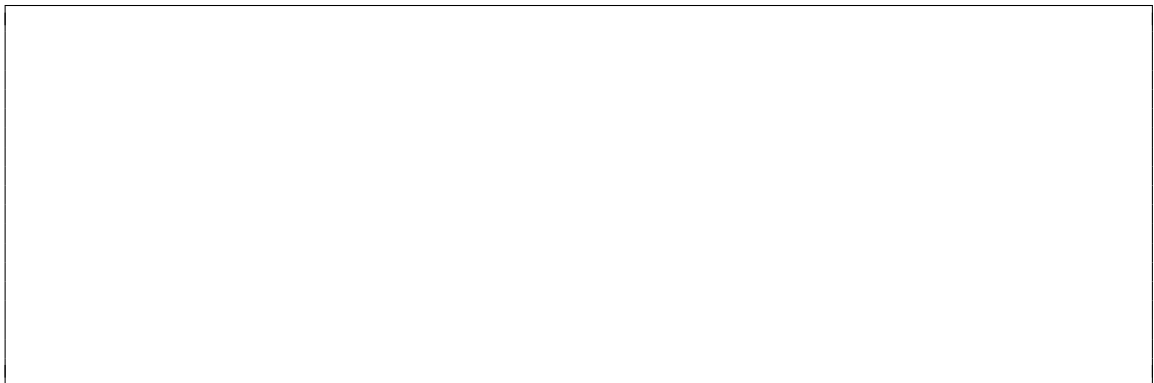
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## 1 Theoretical Questions

1. Does the email format with or without MIME need to indicate the total size of the email?



2. A MIME email message composed of text in English and a JPG image, what headers should it contain?



3. List the correct SMTP commands that you know:

4. If an intermediate SMTP relay receives an email where the MAIL FROM field indicates a different address from the From field in the email format (RFC822), what would happen?

5. If an intermediate SMTP relay receives an email where the DATE field indicates a date older than 30 days:

6. What is the first SMTP command that the client must send after opening a TCP connection with the SMTP server on the corresponding port? Should the client receive anything before proceeding with the first command?

7. What happens if the TCP connection over which POP3 is used between a client and a server breaks? Are the changes finalized? What needs to happen before the connection is closed or broken for the changes to take effect?

8. What type of identifiers does POP3 use (unique/absolute or relative)? What problems can this cause during the session? What practical issue would it have concerning concurrent use?

9. Can multiple commands be sent in parallel during a POP3 session?

10. Does POP3 provide any security to prevent the user's password from being compromised? How could this be addressed?

11. Does IMAPv4 allow the sending of multiple commands simultaneously? Always, at any time? How does it distinguish responses if multiple commands are sent at once?

12. What do we call IMAP responses that start with \*? What are they used for? What happens with commands that allow multiple results (such as those that allow searching) if they are executed in parallel?

13. In IMAPv4, in which state can searching be performed?

14. List commands that can be used in any state of IMAPv4.

15. What are the possible results of the LOGIN command in the IMAP protocol? Are the **results**... different from those of other commands?

16. Assuming two simultaneous IMAP sessions of the same user from different client machines, and in one of them a message is marked with the *delete* flag, would that delete flag be visible from the other session? Is it necessary to close the connection or do something for it to happen?

17. In IMAP4, there are two types of responses from a server, the “**server data**” type and the “**server completion result**” type. How many of each can/should there be? How do they differ?

18. List the advantages of IMAP over POP concerning: **use of multiple devices, simultaneous commands, access to email and its parts.**

