Assignment 2 Answers

Assignment 2

==========
Question 1
==========
What vi command allows you to move to the first line in the current buffer (document), not first line of the current page?

---------- Answer ----------
To move to the first line in the current buffer (file), you would enter the following vi command while in command mode:

1G

==========
Question 2
==========
What command allows you to move to the last line in the buffer(document), not the last line of the current page?

---------- Answer ----------
To move to the last line in the current buffer (file), you would enter the following vi command while in command mode:

G

==========
Question 3
==========
What file in your home directory allows you to customize your vi environment variables permanently?

---------- Answer ----------
entries within ~/.exrc, (vi's resource configuration file), can contain entries to customize your vi environment.

Note: If you using vim, the equivalent file is ~/.vimrc

==========
Question 4
==========
List the properly named parts of a valid e-mail address, briefly describe

each one, and then give 3 examples of complete e-mail addresses.
username@hostname.domain_name...

---------- Answer ----------
Following are the valid parts of a valid email address:
username - The name of the individual, group or destination of the
intended recipient.
@ - The at (@) sign. Used to separate the WHO from the WHERE
part of the email address. The WHO is the username and
thee WHERE is the combination of hostname and domain_name
which follows.
hostname - The name of the machine (server) that is responsible for
holding and forwarding the email to the username (recipient)
identified which is located within the domain name (below).
This is usually a server that is running either an SMTP or POP3
service, or both.
domain_name - The unique identification of the network within the internet's
hierarchical system for which the hostname (above) is
registered (located) on.

Three examples of valid email address are:

wally@gmail.com - A public email address provided by Google
mark.wig@pcc.edu - A student's email address provided by PCC
maria@htpc.net - An email on my own private network.

==========
Question 5
==========
What are the two general categories of operations you can perform in vi?

---------- Answer ----------
In general, thee two categories of operations you can perform while using vi
are either COMMAND MODE operations, and INSERT MODE operations.

Note: There is also a third one known as the LAST LINE MODE, which is also
sometimes referred to as the colon (:) commands.

==========
Question 6
==========
Briefly describe what the SMTP standard protocol format for an e-mail message
is.

---------- Answer ----------
The Simple Mail Transfer Protocol (SMTP) format for an e-mail message, is a
protocol, or set of "rules" that are used to transfer electronic mail between
computers. It is a a server-to-server protocol, and as such, relies on a
different transport protocol (like TCP/IP) for actually moving the information.

Put another way, the TCP/IP layer governs the HOW a message is transferred and the SMTP is the WHAT which constitutes an email versus some other content like a web-page.

SMTP is a connection-oriented, text-based protocol in which a mail sender communicates with a mail receiver by issuing command strings and supplying necessary data over a reliable ordered data stream channel, typically a Transmission Control Protocol (TCP) connection. An SMTP session consists of commands originated by an SMTP client (the initiating agent, sender, or transmitter) and corresponding responses from the SMTP server (the listening agent, or receiver) so that the session is opened, and session parameters are exchanged. A session may include zero or more SMTP transactions. An SMTP transaction consists of three command/reply sequences:

1.MAIL command, to establish the return address, also called return-path, reverse-path, bounce address, mfrom, or envelope sender.

2.RCPT command, to establish a recipient of the message. This command can be issued multiple times, one for each recipient. These addresses are also part of the envelope.

3.DATA to signal the beginning of the message text; the content of the message, as opposed to its envelope. It consists of a message header and a message body separated by an empty line. DATA is actually a group of commands, and the server replies twice: once to the DATA command itself, to acknowledge that it is ready to receive the text, and the second time after the end-of-data sequence, to either accept or reject the entire message.

==========

Question 7

==========

Briefly describe the difference between the POP and IMAP e-mail protocols.

---------- Answer ----------

Effectively, the differences between the Post Office Protocol (POP) and the Internet Messaging Access Protocol, have to to with how the messages are handled once viewed by the client (viewing) program. Generally speaking, if you were only ever using ONE device for checking your email, such as your phone, then the POP method might be acceptable, however, if you wanted to check your email on both your phone, you computer at home/work, then using IMAP would be preferred. One specific example of this is once you've viewed an email using POP, the message is deleted off of the server where it was stored and on the computer/device that you viewed it on. If you were to later attempt to view/retrieve that email from say your work computer, it would appear as though the email wasn't there at all.

==========

Question 8

==========

What does the MIME attachment standard for e-mail deal with?

---------- Answer ----------

The Multipurpose Internet Mail Extensions (MIME) attachment standard, deals

with basically, anything NOT covered by normal email support. The most vivid example of how this specific standard is used, is with regard to how emails embed or contain audio, video, images and even programs. While not limited to just this, other examples may include how other character sets such as Japanese or Russian characters are encoded. Other examples may include how mesage bodies can contain multiple parts (not just the main body), extra header information

==========
Question 9
==========
List and briefly describe some common functions found in UNIX e-mail systems.

---------- Answer ----------
Some of the more common functions found in a UNIX email system are:

mail - The command line email client for UNIX operating systems. With it you could easily send the contents of a file to an email receipient as we did for lab2 with:

mail -s "Your subject here" somebody@example.com < file.txt

cc - carbon copy
alias - creation of lists of emails
reply - respond messages
uuencode - Utility for attaching files to an email
Bcc - blind copy
attachments

Bonus:

UNDERSTANDING AN EMAIL HEADER