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## ANSWERS TO EVEN-NUMBERED EXERCISES

2. How would Max store a copy of his email in `~/mbox` and send a copy to `max@bravo.com`?

Max needs to create a `~/.forward` file with the following lines:

```
$ cat ~/.forward
~/mbox
max@bravo.com
\max
```

4. What does `dnl` stand for in the `m4` macro language? What are `dnl` commands used for?

The `dnl` command, which stands for **delete to new line**, instructs the compiler to ignore anything on a line following the `dnl`. It is used to set off comments.

6. Describe the software and protocols used when Max sends an email to Sam on a remote Linux system.

One possible answer of many:

- a. Max's MUA passes the email to `sendmail`.
- b. The `sendmail` daemon uses SMTP to deliver the email to the instance of `sendmail` on Sam's system.
- c. On Sam's system, `sendmail` passes the email to the local MDA (`procmail`).
- d. The MDA stores the email in Sam's file in the spool directory.
- e. Sam's MDA retrieves the email from the spool directory.

8. Assume you have a script that sends its output to standard output. How would you modify the script to send the output in an email to a user specified by the first argument on the command line? (You may assume that the data is stored in **\$RESULT**.)

```
echo "$RESULT" | /usr/sbin/sendmail $1
```

10. If you accidentally delete the **/etc/aliases** file, how could you easily re-create it (assuming that you had not restarted **sendmail**)?

```
# praliases > /etc/aliases
```