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## CHAPTER 25

# *Domain Name System (DNS)*

## *Solutions to Odd-Numbered Review Questions and Exercises*

### Review Questions

1. When the name space is large, searching a name in *hierarchical* structure (tree) is much faster than searching it in a *flat* structure (linear). The first can use a binary search; the second needs to use a sequential search.
3. *Generic domain*, *country domain*, and *inverse domain*.
5. In *recursive resolution* the client queries just one server. In *iterative resolution* the client queries more than one server.
7. A *PQDN* is a domain name that does not include all the levels between the host and the root node.
9. *Caching* reduces the search time for a name.
11. *DDNS* is needed because the many address changes makes manual updating inefficient.

### Exercises

13.
  - a. **FQDN**
  - b. **FQDN**
  - c. **PQDN**
  - d. **PQDN**
15. Remembering a *name* is often easier than remembering a *number*.
17. There are *three labels* but *four levels* of hierarchy since the root is considered a level.
19. This is a *generic domain*.
21. The number of question sections and answer sections must be the same. The relationship is *one-to-one*.

