

Chapter 20

- 20.1 No solution needed.
- 20.2 No solution needed.
- 20.3 No solution needed.
- 20.4 System calls on our BSD system and a library call on Solaris (in section 3C).
- 20.5 It is defined as 512 in the `/usr/include/limits.h` and `/usr/include/syslimits.h` files on our BSD system. It means the max bytes that can be atomically written in a pipe. It is also the size of the pipe, which is implemented as a circular buffer.
- 20.6 Browse through <http://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbers.xhtml> to obtain the answer for the question.
- 20.7 40 domains (i.e., address families) have been defined (too many to list here). When allocating a new `AF_` constant after 37, only even numbered constants allocated for FreeBSD until 134, because odd numbered `AF_` constants starting with 39 and up to 133 are now reserved for vendors.

As for services, five service types have been defined as `SOCK_STREAM`, `SOCK_DGRAM`, `SOCK_RAW`, `SOCK_RDM`, and `SOCK_SEQPACKET`.
- 20.8 (Page 902: It should be Exercise 20.8 and not 20.7. Please correct the numbers of subsequent exercises in this chapter accordingly.)

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- 20.9 No solution needed.
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- 20.27 No solution needed.
- 20.28 See the `/etc/services` file on your system to get answer to the question.
- 20.29 Numerical value assigned to UDP is 17. A total of 145 (0-142, 240, and 258) protocols have been assigned values.
- 20.30 Many clients including SSH, FTP, Telnet, and HTTP. Why these services need to use concurrent clients is explained in Section 20.11.