

System Administration for Beginners

Week 4 Homework

March 9, 2009

Please turn in your homework at the beginning of class, with the assignment title, your name, `inst` login, and the answers (if multiple choice, just the letter is fine).

1. Match the default ports for SSH, FTP, SMTP, HTTPS.
 - (a) 80
 - (b) 24
 - (c) 65535
 - (d) 53
 - (e) 21
 - (f) 443
 - (g) 25
 - (h) 123
 - (i) 22
2. If you owned all the IP addresses that began with 192.168, where the latter two numbers could be a valid number, approximately how many IP addresses do you own?
 - (a) 20 000
 - (b) 47 500
 - (c) 65 000
 - (d) 100 000
3. Reverse DNS has to match forward DNS
 - (a) True
 - (b) False
4. Which of the following is the best way to uniquely identify a computer on the Internet?
 - (a) domain name

- (b) IP address
 - (c) server name
 - (d) A record
5. Which of the following is the best way to uniquely identify a computer on the Internet?
- (a) domain name
 - (b) IP address
 - (c) server name
 - (d) DNS A record
6. The most efficient and fastest route between two points on Internet is the shortest path.
- (a) True
 - (b) False
7. The number of routers between two Internet points, as reported by `traceroute`, is most related to which of the following properties?
- (a) the speed of the connection between them
 - (b) the IP addresses of the two Internet points
 - (c) the domain names of the two internet points
 - (d) the distance between them
8. Of the following directories, where are you most likely to find the `adduser` command?
- (a) `/etc`
 - (b) `/home`
 - (c) `/bin`
 - (d) `/sbin`
9. The `root` can read and write to any user's files.
- (a) True
 - (b) False
10. It is possible to use any positive integer value for a server daemon to listen on when running it as a regular user.
- (a) True
 - (b) False
11. For video streaming, what protocol would you most likely use?

- (a) UDP
 - (b) TCP
 - (c) STREAM
 - (d) P2P
12. If you were designing a new proprietary software that required a new proprietary protocol to speak to a central server (*i.e.*, secret DRM protection), what layer of the OSI model would you be most concerned with?
- (a) Physical
 - (b) Transport
 - (c) Application
 - (d) Communication
 - (e) None of the above