

Homework 1

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Answer 1

A protocol is a definition for a standard set of messages, the order these messages are exchanged between two parties, and the actions to take based off of these messages. In the layered network architecture, protocols are what each layer uses to communicate with its corresponding layer from another party. A network service is what runs at each layer of the network architecture. This is what is going to be doing the actual work at that layer and passing it off to other layers (e.g. IP layer which handles the routing of traffic from point to point). The differences between the implementation of a service and the interface is that the interface is just providing a way for two service layers to talk to each other. The service will do some actual work, and then pass it off to another service through an interface.

Answer 2

Run at noon: ping cs.umass.edu

— cs.umass.edu ping statistics —

28 packets transmitted, 28 received, 0% packet loss, time 27039ms

rtt min/avg/max/mdev = 11.343/15.693/27.391/3.756 ms

Answer 3

$$d_{e2e} = 2 * d_{proc} + \sum_{i=1}^3 \frac{L}{R_i} + \sum_{i=1}^3 d_i s_i$$

References

None