COMP90007 Week 2 - Lecture 3 Tutorial Questions

Semester 2, 2018

1. An alternative to a LAN is simply a big timesharing system with terminals for all users. Give two advantages of a client-server system using a LAN.

- 2. Which of the OSI layers handles each of the following:
 - a) Dividing the transmitted bit stream into frames.
 - b) Determining which route through the subnet to use.

3. A collection of five routers is to be connected to a point-to-point subnet. Between each pair of routers, the designers may put a high speed line, a medium speed line, a low speed line, or no line. If it takes 100 ms of computer time to generate and inspect each topology, how long will it take to inspect all of them?

4. What are two reasons for using layered protocols?

5. The Internet is roughly doubling in size every 18 months. Although no one really knows for sure, one estimate put the number of hosts on it at 600 million in 2009. Use these data to compute the expected number of Internet hosts in the year 2018. Do you believe this? Explain why or why not.

 6. List two advantages and two disadvantages of having international standards for network protocols.

To Client-server system uses a satellite network, with the satellite at a height of 40, 000 km. What is the best case delay in response to a request?