Chapter 3 Quiz 4

Computer Networking   2017.4.06

Name: 蒋东   Student No: 5140219152

Note: Write T or F before each question number

F 1. Consider an HTTP Web server using persistent connections. Suppose the server spawns a separate process for each client that connects to the server. Then each of these spawned processes will have different server port numbers.

F 2. Applications using UDP service are always unreliable.

F 3. The two error control methods (Error Detection Retransmission, and Forward Error Correction) can recover all the three kinds of errors: bit error, packet loss and duplicate packets. *packet loss*

T 4. 16-bit CRC can detect all single-bit errors and all burst errors <=16 bits. So CRC is quite powerful. Another reason of its wide-usage is that it can be implemented in hardware.

F 5. Timer is used to detect packet loss. Duplicate acks are caused by set the timer too long. *short*

F 6. In rdt 3.0, retransmissions are triggered by timeout events and duplicate acks.

F 7. For a channel with 10Mbps capacity, 10 ms prop. delay, 5KB packet, the utilization of stop-and-wait protocol is around 17%; the fully utilized the channel capacity, pipelining should be used with a window size of at least (5) 6

T 8. Duplicate ACKs in selective repeat provide hints about out of order packets.

T 9. In sliding window protocols, the sender will advance/slide sending window to next unACKed seq# when ACK of the smallest unACKed packet arrives; the receiver will advance/slide receiving window to next expected seq# when a new packet arrives.

T F 10. All the RDT protocols can be implemented at any layer which requires reliable data transfer.