

CS 372 **Introduction to Computer Networks**
Self-Check Exercises: Lecture 16

- 1) What is reliable data transfer?
- 2) What about RDT is indicated by the two-generals problem?
- 3) What are some aspects of reliable data transfer?
- 4) Theoretically, what is the maximum number of bytes that can be carried in the “application data” section of a UDP segment?
- 5) What aspects of RDT does the UDP protocol implement?
- 6) (TCP and UDP use 16-bit sums to compute the checksum field. For this exercise, use 8-bit sums.) Given the following bytes:

0 1 0 1 0 0 1 1

0 1 1 0 0 1 1 0

0 1 1 1 0 1 0 0

- a. What is the 1's-complement of the sum of these bytes?
- b. If there is only one error bit in a segment, could it go undetected? How?
- c. If there are 2 bits in error, could the errors go undetected? How?