CSCI 4320 (Principles of Operating Systems), Fall 2001

Homework X

Assigned: December 11, 2001.

Due: December 18, 2001, at noon. *Not accepted late.*

Credit: Up to 30 extra credit points.

> *Note:* The HTML version of this document may contain hyperlinks. In this version, hyperlinks are represented by showing both the link text, formatted like this, and the full URL as a footnote.

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1 General instructions

Answer as many (or few) of the following questions as you like. (Notice, however, that you can receive at most 30 extra-credit points.) You may write out your answers by hand or using a word processor or other program, but please submit hard copy, either in class or in my mailbox in the department office.

2 Questions about chapter 9 (Security)

1. (2 points) Answer question 2 on p. 667 of the textbook. Also describe what method you used to break the cipher.
2. (2 points) Answer question 6 on p. 667 of the textbook.
3. (2 points) Answer question 11 on p. 668 of the textbook.
4. (2 points) Answer question 16 on p. 668 of the textbook.
5. (2 points) Answer question 17 on p. 668 of the textbook.
6. (2 points) Answer question 25 on p. 669 of the textbook.
7. (2 points) Answer question 26 on p. 669 of the textbook. (Hint: Re-read the section on Trojan horses.)
8. (2 points) Answer question 28 on p. 669 of the textbook.

3 Questions about chapter 10 (UNIX and Linux)

1. (2 points) Answer question 1 on p. 758 of the textbook. (Probably this question should begin "When the kernel catches *a* system call . . . ")
2. (2 points) Answer question 4 on p. 758 of the textbook.
3. (2 points) Answer question 5 on p. 758 of the textbook.
4. (2 points) Answer question 11 on p. 759 of the textbook.
5. (2 points) Answer question 13 on p. 759 of the textbook.
6. (2 points) Answer question 21 on p. 760 of the textbook.
7. (2 points) Answer question 35 on p. 761 of the textbook.
8. (2 points) Answer question 42 on p. 761 of the textbook.

4 General question

1. (Up to 20 points) Describe something you have done that you believe is worth extra credit for this course. This could be anything from better-than-average attendance or class participation to making a contribution to an open-source operating system. Points credited for this question will depend on the difficulty and relevance of what you have done and the quality of your explanation.