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 <u>like this</u>, 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.