CS 32, Fall 2012
Hw7: 50 total points

Print this form, staple loose pages together, and write your answers on it.

Accepted: files by `turnin` before your lab section on Thursday, November 29,
          plus this paper at the beginning of your lab section on Nov. 29.
No email submission allowed.

Name (1 pt): _____

Umail (1 pt): _____@umail.ucsb.edu

Lab Section (1 pt) Circle one: 5:00   6:00   7:00

For programming-related tasks, either place a check mark on the "done" line if
you (and your partner) successfully did it, or write a brief explanation.

Hint: Read the textbook before answering the theory questions

   1. (6 pts.) What do we call a function signature?

   2. (10 pts; 2 each) Answer T(rue) or F(alse) to each of the following:

       a. ___ A parent class can have only one derived class.

       b, ___ Constructors are inherited to the derived classes.

       c. ___ A derived class can use all members of the parent class by name.

       d. ___ The only way a child class can access the private members of the
parent class is to use the protected qualifier.

       e. ___ A derived class cannot change the signature of a function derived
from the parent class.

   3. (6 pts.) What are some pros and cons of using protected (instead of
private) variables?

4. (10 pts.) Get inheritance.cpp (see Lab07 instructions). You should also submit your code to get full credit.

    a. Write down the output for the following cases:

        i. A calls set from the base class with arguments 3 and 4; then calls print

        ii. A calls printk()

        iii. B calls set from the base class with arguments 3 and 4; then calls print

        iv. B calls setk() and printk()

        v. B calls setm() and printm()

    b. Submit your modified inheritance.cpp file (at the end of hw7)

  #4 done: _____
       (check, or say why not)

5. (15 pts.) Fix the error you found during Lab07 on simple.cpp (Step 2), and submit your revised simple.cpp file. Attention: Don't use the public or protected qualifier for the ssn variable. Correct the program using a function to have access to this variable (see p.824 in the Savitch textbook).

  #5 done: _____

End of Hw7

Turn-in instructions:

A. Be sure that both files (inheritance.cpp and simple.cpp) are in your ~/cs32/hw7/ directory. Then type the following to turn both in at once:

    turnin hw7@cs32 inheritance.cpp simple.cpp

  If you worked with a partner, then just turn in one copy for both of you, and enter your partner's name on the following line:

  _____

B. Each student must turn in this completed paper at your next lab.