CSE 143 Quiz 2, April 3, 2001 Name _____

Please read all the questions carefully and raise your hand for assistance if you have any questions. Keep your answers brief.

1.) Suppose we see the following line of code in a program:

```
ifstream thing("some.txt")
```

(a) What is the significance of identifier "thing" in this line of code?

"thing" is a variable of type ifstream, a file stream.

(b) What happens when this line of code is executed?

This declares variable `thing` and, assuming nothing goes wrong, it opens a file named `some.txt` in the current directory and initializes `thing` so it is an input stream referring to that file.

2.) In yesterday's lecture, two ways of measuring the "goodness" of a module design were described. For each of these, circle whether a **good** design should minimize or maximize that quality.

Coupling: (Minimize) Maximize (circle one)

Cohesion: Minimize (Maximize) (circle one)

3.) Something non-trivial is wrong with the following code. What is it? (If you find a missing semicolon or some other punctuation error, that's not it.)

```
class Order {
public:
    float totalPrice;
    void SetName(string aName);
    void SetCreditCard(int aCard);
private:
    int  creditCard;
    string name;
};

void processOrder(Order &anOrder, string aCustomer, int aCreditCard,
                                                    int quantity, float unitPrice) {
    anOrder.name       = aCustomer;
    anOrder.creditCard  = aCreditCard;
    anOrder.totalPrice   = quantity * unitPrice;
}
```

These two statements attempt to alter private data belonging to anOrder. That protection violation will be caught by the compiler.