

CS 311 Data Structures and Algorithms, Spring 2008
Quiz 7 Solutions

Quiz 7 was given in class on Friday, March 28, 2008.

Problems below are based on the reading “Guidelines for Error Handling in C++” by Anders Johnson.

1. [2 pts] What does Johnson say that a program should do if it determines that it contains a bug?

He says that the program should then quit (by calling “`abort()`”).

From the reading:

If a program detects an error in its own code, then it should call `abort()` such that the error can be debugged.

2. [3 pts total] **The Preferred Guarantee.**

2a. [1 pt] What “guarantee” does Johnson say we should prefer? (Name it.)

He says we should prefer the “Strong Guarantee”.

From the reading:

Prefer the Strong Guarantee

2b. [2 pts] What does this guarantee state?

The Strong Guarantee states that if a function throws, then it should perform no other action visible to the client.

From the reading:

The Strong guarantee dictates that if an error or exception escapes the call, then the call has no visible side effects (other than the possible logging of events, provided that the fact that such events are reverted due to an exception is also logged).