

But $A(1, 1)$ is zero, and the result is a division by zero.

The program, comments and formatting notwithstanding, fails on a significant class of equations — those which happen to have a zero on the diagonal. Of course, those familiar with the limitations of Gauss-Seidel iteration would know enough to avoid such cases, and the textbook contains a proper warning. But it is a small cost to add an extra test to detect a zero on the diagonal, however unlikely it may be.

Perhaps what the article really shows is that people who attempt to criticize programming style run the risk of being criticized in turn. On that note we bring our discussion to a close.

In summary:

- (1) If a program is incorrect, it matters little what the documentation says.
- (2) If documentation does not agree with the code, it is not worth much.
- (3) Consequently, code must largely document itself. If it cannot, rewrite the code rather than increase the supplementary documentation. Good code needs fewer comments than bad code does.
- (4) Comments should provide additional information that is not readily obtainable from the code itself. They should never parrot the code.
- (5) Mnemonic variable names and labels, and a layout that emphasizes logical structure, help make a program self-documenting.