

Programming Language Syntax

2.7 Explorations

- 2.40 Experiment with syntax errors in your favorite compiler. Feed the compiler deliberate errors and comment on the quality of the recovery or repair. How often does it do the “right thing”? How often does it generate cascading errors? Speculate as to what sort of recovery or repair algorithm it might be using.
- 2.41 Spelling mistakes (typos in keywords and identifiers) are a common source of syntax and static semantic errors. Identifying such errors—and guessing what the user meant to type—could result in significantly better error recovery. Discuss how you might go about incorporating spelling correction into some existing error recovery system. (Hint: You might want to consult Morgan’s early paper on this subject [Mor70].)

