Program Correctness

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Notes to the instructor

The project is designed to focus on the key ideas in program correctness, rather than on the formal aspects of the theory. Terminologies like axioms, inferences, and deductive systems are deliberately avoided. Emphasis is placed on the practice of proving the partial correctness of interesting programs. It is the authors belief that the students will appreciate better the power of program correctness through the analysis of seemingly simple and yet non-trivial programs. The correctness proof of Program Partition (Section 7) is very challenging. It may be skipped if time is not permitted, or if the students are finding it too difficult.

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