

Milestone #5: Optimization

Overview

For this milestone, select and implement an optimization of your choice. The following list contains some of the optimizations that you might consider. A more aggressive form of useless code removal than that done in the previous milestone is *not* a valid choice for this milestone (though you are still welcome to do so).

- Constant Propagation
- Constant Folding
- Local Value Numbering
- Global Redundancy Elimination (Common Subexpression Elimination)
- Loop Invariant Code Motion
- Leaf Function Optimization
- Tail-Recursion Elimination
- Tail-Call Optimization
- Function Inlining

If you would like more information on a specific algorithm than that provided in the textbook, just ask.

Note: If you are going to “make up” your own optimization, then you must check with me for approval before the end of lab one week prior to this milestone’s demonstration date.

Command-line Options

You should provide a command-line option to prevent the selected optimization.