May 29, 2014 CSC 431

## Milestone #6: 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.

- 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.