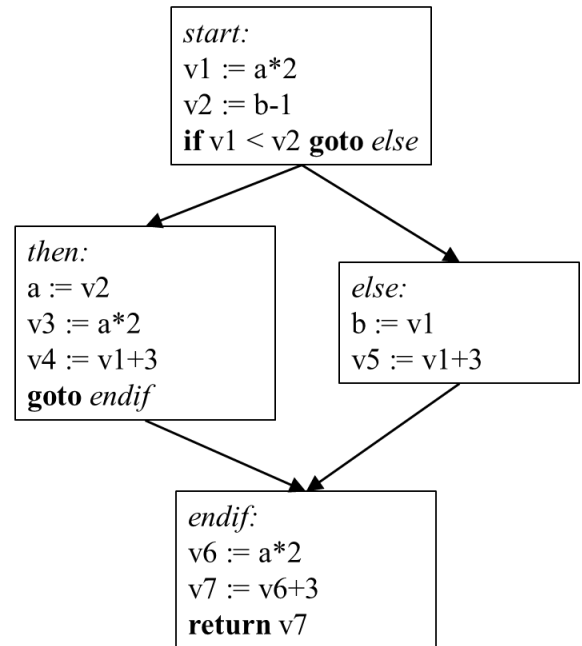


Andrew ID: _____

1. **[Available Expressions].** Perform global value numbering and available expressions dataflow analysis to this program:



1. **[Live Variables].** Perform live variable analysis on the program above, and eliminate dead code.