Meeting 8: Register Allocation

Exercise 2
HW3

Questions

%eax, %edx, %ecx, %edx, %esi, %edi

* function calls - interference

* interference graph
  - neg
  - pushl, popl

* coloring algorithm

\[ \text{write to } x, y, z \]
\[ \text{call input} \]
\[ \text{movl } \%eax, \text{tmp0} \]
\[ \exists x, y, z \]

Diagram:

[Diagram showing register allocation]
Colors = registers

NP-complete

Greedy algorithm: "Locally optimal" choices based on heuristics - don't backtracking

"Sudoku-based graph coloring"