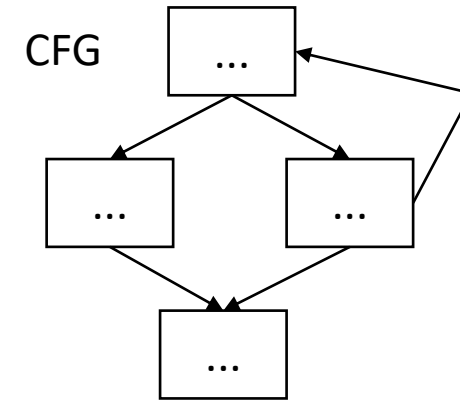
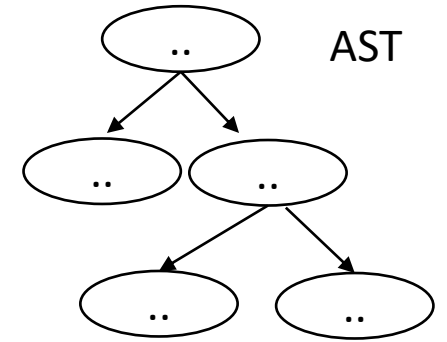


CSE110A: Compilers

MIDTERM STUDY GUIDE *AND* *ANNOUNCEMENTS*



3 address code

```
store i32 0, ptr %2
%3 = load i32, ptr %1
%4 = add nsw i32 %3, 1,
store i32 %4, ptr %1
%5 = load i32, ptr %2
```

About Midterm Exam

- The Midterm will be given on Tuesday, May 6, at 5:20PM, 90 minutes long.
- Location: Our classroom, Stevenson Acad 175
- There will be ~3 questions with multiple parts. No programming problems.
- Test will be proctored by ou Tas, Rithik and Yanwen, and possibly some tutors
- 3 pages of notes are allowed. It will be a closed-book exam.
- You may not bring any materials other than the note sheets.
- No electronics may be used or be present on your desk
- Pencils and erasers are recommended
- You will have 3 sheets in the back of your test for scratchwork, and more will be provided if needed.

Midterm study guide (so far)

Any of the following items described in the next slide are fair game. Anything not listed but in the lectures are fair game. Any combination of topics is fair game. This is only meant to be an overview of what we have discussed so far.

Midterm study guide (so far)

- Regular expressions
 - Operators, how to specify, how match vs full match works
- Scanners
 - What the API is, how strings are tokenized, how to specify tokens, token actions
- Grammars
 - How to specify a grammar, how to identify/avoid ambiguous grammars, how to show a derivation for match, parse trees
 - How to re-write grammars not to be left recursive, how to identify first+ sets
 - How the top-down parsing algorithm works, how recursive decent parsers works
- Symbol tables
 - How scope can be tracked and manage during parse time, symbol table specification and implementation
- No material from Module 3
- No material from Bottom-Up Parsing

Announcements

- Homework 1 has been graded
 - If you have questions about your grade check with your TA
 - You have a limited amount of time to request regrades.
-
- Homework 2 is due Thursday 5/1 at 11AM.
 - A new software has been provided to you to learn more about FIRST, FOLLOW, and FIRST+ sets. You can use it to help with your homework.
-
- Homework 3 will be released on Thursday 5/1.
 - The Midterm review lecture delivered Thu 5/1 has been published. It is available via a link in the syllabus just below the Piazza link.