

Lecture #23: Chomsky Hierarchy IV – Normal Forms and Parsing

What Will Happen During the Lecture

Remember... You Had Homework!

Students were asked to have worked through a set of notes before this first lecture:

- Lecture Notes — “Chomsky Hierarchy IV: Normal Forms and Parsing”

Of course, you may attend the lecture presentation if you have not worked through this material ahead of time — but it will not be repeated for you during the lecture presentation.

Topics To Be Discussed

Students will have an opportunity to ask questions about course material, as they prepare for the final examination.

If time and interest allows then the following will be discussed.

- A correct — but, generally, inefficient — recursive algorithm for deciding **membership** in the language of a given right-regular grammar, and the generation of a **parse tree** for a member of the language of this grammar, will be obtained.
- The process described in the online notes will be used to produce a context-free grammar in **Chomsky normal form** that has the same language as that of a given context-free grammar.
- A correct — but, generally, inefficient — recursive algorithm for deciding **membership** in the language of a context-free grammar, will then be obtained.