

Lecture #9: Nondeterministic Time — Speedup, Emulation, and a Nondeterministic Time Hierarchy Theorem

What Will Happen During the Lecture

Remember... You Had Homework!

Students were asked to work through the following set of lecture notes before this lecture.

- Lecture Notes — “Nondeterministic Time — Speedup, Emulation, and a Nondeterministic Time Hierarchy Theorem”.

It is likely that virtually all of the material, included in these notes, is material that CPSC 511 students have not seen before.

Activities During the Lecture Presentation

This lecture describes a surprisingly simple simulation of a k -tape nondeterministic Turing machine by a three-tape nondeterministic Turing machine — whose correctness might not be obvious. The correctness of this simulation will be discussed.