

[Play list](#)

- Here's a list of all the things we've covered.
 - Alphabets, Strings, and Languages
 - DFAs and Regular Languages
 - The Regular Operations (Union, Concatenation, and Kleene star)
 - Nondeterminism and NFAs
 - Equivalence between NFAs and DFAs (Subset Construction)
 - Closure under the Regular Operations
 - Regular Expressions
 - Equivalence between Regular Expressions and Finite Automata
 - Converting Regular Expressions to NFAs
 - Converting DFAs to Regular Expressions
- The amount of material covered is equal to the first two-and-a-half lectures of the [MIT Playlist](#). You might also find [the recorded lectures from last semester](#) and [this playlist](#) helpful.
- How to prepare:
 - If you haven't already, read through Chapter 1 (except Section 1.4) from Sipser. I know most of you aren't in the habit of reading textbooks but reading does help in understanding the material more deeply.
 - There are practice problems at the end of chapter 1. You should do the ones labeled "Exercises" and not "Problems"
 - If you want additional problems, check out the practice sheets on buX (weeks 2-6).
- Additional Resources:
 - Quiz 1 (section [5](#), section [6](#), section [8](#))
 - Quiz 2 (section 5 ([1](#), [2](#)), section 6 ([1](#), [2](#)), section 8 ([1](#), [2](#)))
 - Past midterm questions ([Spring 22](#), [Summer 22](#)) (Note that the syllabus for the past midterms might have been different)
- Assignment 1 instructions:
 - Solve the quiz 1 problems for sections 5 and 8, turn your solutions into a single pdf file, and submit it [here](#).
 - Deadline: 5 pm, November 15. The deadline is quite far away. But it would be best if you were doing the assignment as you're preparing for the midterm.

Good luck!

- [Final Question Papers](#)
- [Midterm Question Papers](#)
- CSE331: Automata and Computability
- Hand Notes:
- <https://github.com/amirsakib16/CSE331-Automata-Computability>
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