

474 Instructor Notes from Day 11 slides:

Slide 10: Regular Expressions Define Languages

Note that the regular expressions ϵ and α^+ are not strictly necessary, since there are other regular expressions that represent the same languages.

ϵ is equivalent to \emptyset^* , α^+ is equivalent to $\alpha\alpha^*$

Slide 14: Examples

$\{a\}^*\{b\}^*$

$\{a, b\}^*$

$\{a, b\}^*$

All strings with abba as a substring

Slide 18: More Regular Expression Examples

$\{a\}^*$

$\{a\}^*$

$a^*(b \cup \epsilon) a^*$

$((ab)^*(a \cup \epsilon)) \cup ((ba)^*b)$