

# LPI Exercises for Chapter 7 — Regular Expressions

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## 1 Find matching words

Which of the following words are matched ( $\epsilon$  is the empty word)?

Regular expression	words
ab	a b c ab abc acb
a(bc)*	a ab abc abcbc
abc*	a ab abc abcc abcbc
abc+	a ab abc abcc abcd
a(b c)d	ad abd acd abcd
ab?c	a ab ac abc
(ab)?c	a c ab abc
ab{2,4}	a ab abb abbb abbbb abbbbb
(ab)\1	a ab abb abab
a b*	$\epsilon$ a b aa aba bb bbb

## 2 Give a RegEx

Write down a regular expression that matches all the following words.

words	Regular expression
MSSM, CMSSM, NMSSM	
E6SSM, CE6SSM, E7SSM	
a b ab abab aabab	
xml tags (incl. $\forall$ content):	<code>&lt;xml&gt;...&lt;/xml&gt;</code>

Q: What did one regular expression say to the other?

A: `.*`