

- Tutorial (/lesson/introduction_abcs)
- References (/problem/matching_decimal_numbers)

Lesson 7: Mr. Kleene, Mr. Kleene

A powerful concept in regular expressions is the ability to match an arbitrary number of characters. For example, imagine that you wrote a form that has a donation field that takes a numerical value in dollars. A wealthy user may drop by and want to donate \$25,000, while a normal user may want to donate \$25.

One way to express such a pattern would be to use what is known as the **Kleene Star** and the **Kleene Plus**, which essentially represents either **0 or more** or **1 or more** of the character that it follows (it always follows a character or group). For example, to match the donations above, we can use the pattern **\d*** to match any number of digits, but a tighter regular expression would be **\d+** which ensures that the input string has at least one digit.

These quantifiers can be used with any character or special metacharacters, for example **a+** (one or more a's), **[abc]+** (one or more of any a, b, or c character) and .* (zero or more of **any** character).

Below are a few simple strings that you can match using both the star and plus metacharacters.

Exercise 7: Matching Repeated Characters

Task	Text		
Match	aaaabcc		⊘
Match	aabbbbc		\odot
Match	aacc		\odot
Skip	a		
[bc]+			
Continue >			

Solve the above task to continue on to the next problem, or read the Solution.

Next – Lesson 8: Characters optional (/lesson/optional_characters)
Previous – Lesson 6: Catching some zzz's (/lesson/repeating_characters)

Find RegexOne useful? Please consider Donating (\$4) via Paypal to support our site.

Tweet

2019 © RegexOne Email (mailto:regexone@gmail.com) | Twitter (http://twitter.com/regexone)

Additional Courses
Interactive SQL Lessons (https://sqlbolt.com)