

AGENDA

WHAT ARE REGULAR EXPRESSIONS?

WHAT IS JAVA REGEX?

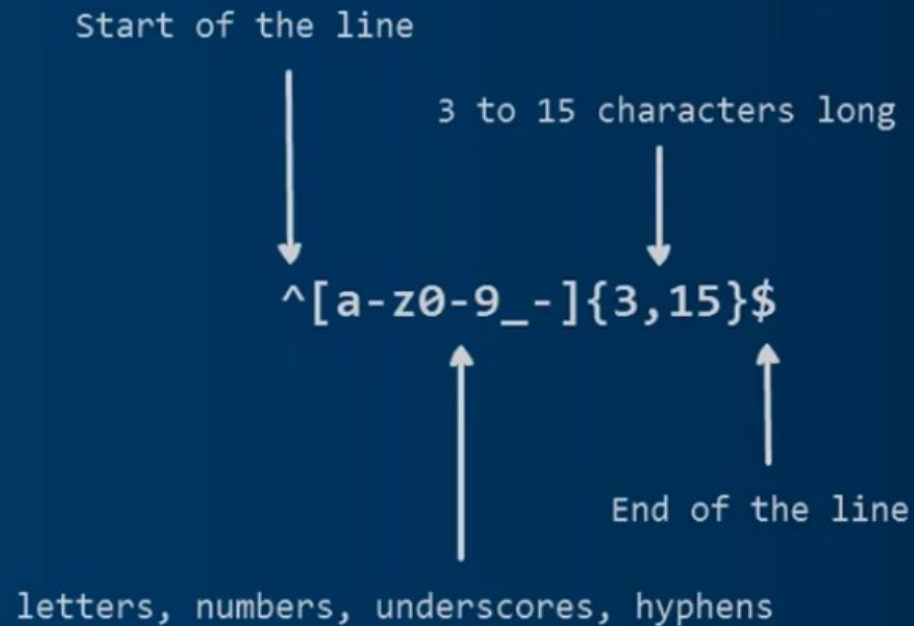
MATCHER CLASS

PATTERN CLASS

REGEX CHARACTER CLASS

REGEX QUANTIFIERS

REGEX METACHARACTERS

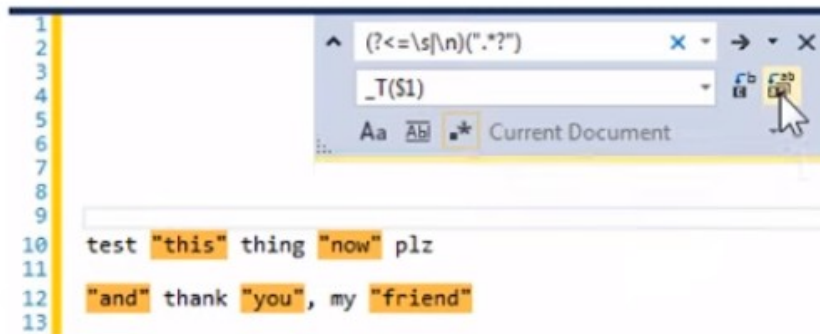
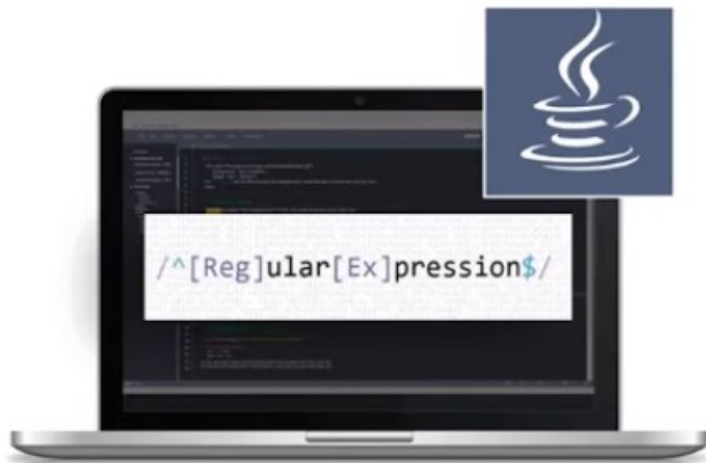


WHAT ARE REGULAR EXPRESSIONS?

A *Regular Expression* is a sequence of characters that constructs a search pattern. When you search for data in a text, you can use this search pattern to describe what you are looking for.

WHAT IS JAVA REGEX?

The Java Regex is an API which is used to define a pattern for searching or manipulating Strings. It is widely used to define the constraint on Strings such as password and email validation.



MATCHER CLASS

<code>boolean matches()</code>	Tests whether the given regular expression matches or not
<code>boolean find()</code>	Used to find the next expression that matches the pattern
<code>boolean find(int start)</code>	Searches the next expression from the given start number
<code>String group()</code>	Used to return the matched sequence
<code>int start()</code>	Returns the starting index
<code>int end()</code>	Returns the ending index
<code>int groupCount()</code>	Returns the total number of the matched sequence

PATTERN CLASS

<code>Static Pattern compile(String regex)</code>	It compiles the given regex and returns the instance of a pattern
<code>Matcher matcher(CharSequence input)</code>	Used to create a matcher that matches the given input with the pattern
<code>Static boolean matches(String regex)</code>	It works as a combination of compile and matcher methods.
<code>String split[]</code>	Used to split the given String around matches of a given pattern
<code>String pattern()</code>	Helps to return the regex pattern
<code>Int end()</code>	Returns the ending index

REGEX CHARACTER CLASS

[abc]	a,b or c (A Simple class)
[^abc]	Any class except a, b or c (negation)
[a-zA-Z]	A through Z or a through z inclusive (Range)
[a-d[m-p]]	a through d or m through p (union)
[a-z&&[def]]	d,e, or f (Intersection)
[a-z&&[^bc]]	A through z except b or c (Subtraction)
[a-z&&[^m-p]]	A through z and not m through p (Subtraction)

REGEX QUANTIFIERS

$X?$	X occurs once or not at all
X^+	X occurs more than one times
X^*	X occurs zero or more times
$X\{n\}$	X occurs n times only
$X\{n, \}$	X occurs n or more times only
$X\{y, z\}$	X occurs at least y times but less than z times

REGEX METACHARACTERS

.	It can be any character
d	Represents any digits
D	Represents any non digit
s	Represents any white space
S	Non white space character
w	It can be a word character
W	It can be a word character
b	Represents a word boundary
B	It represents a non word boundary