Character	Description	Example
[]	A set of characters	"[a-z]"
\	Signals a special sequence (can also be used to escape special characters)	"\d"
	Any character (except newline character)	"mao"
^	Starts with	"^hello"
\$	Ends with	".com\$"
*	Zero or more occurrences	"x*"
+	One or more occurrences	"x+",
{}	Exactly the specified number of occurrences	"x{2}"
I	Either or	"yes no"
?	Zero or one occurrences	"x?"

Special Sequences

A special sequence is a \setminus followed by one of the characters in the list below, and has a special meaning:

Character	Description	Example
\d	Returns a match where the string contains digits (numbers from 0-9)	"\d"
\D	Returns a match where the string DOES NOT contain digits	"\D"
\s	Returns a match where the string contains a white space character	"\s"
\S	Returns a match where the string DOES NOT contain a white space character	"\S"
\w	Returns a match where the string contains any word characters (characters from a to Z, digits from 0-9, and the underscore _ character)	"\w"
\W	Returns a match where the string DOES NOT contain any word characters	"\W"

A set is a set of characters inside a pair of square brackets [] with a special meaning

Set	Description
[abc]	Returns a match where one of the specified characters (a, b, or c) are present
[a-z]	Returns a match for any lower case character, alphabetically between a and z
[^abc]	Returns a match for any character EXCEPT a, b, and c
[0123]	Returns a match where any of the specified digits (0, 1, 2, or 3) are present
[0-9]	Returns a match for any digit between 0 and 9
[0-7][0-5]	Returns a match for any two-digit numbers from 00 and 75
[a-zA-Z]	Returns a match for any character alphabetically between a and z, lower case OR upper case
[+]	In sets, $+$, $*$, ., $ $, (), $$$,{} has no special meaning, so $[+]$ means: return a match for any $+$ character in the string