Character	Function	Example
literal characters	Directly matches characters	"cat"  • "cat"  • "dog" (no match)
<b>∖</b> d	Matches a digit from 0 to 9	<ul> <li>"1"</li> <li>"A" (no match)</li> <li>"_" (no match)</li> <li>"!" (no match)</li> <li>" " (no match)</li> </ul>
	Matches a non-digit	<ul> <li>"1" (no match)</li> <li>"A"</li> <li>"1"</li> <li>"1"</li> <li>""</li> </ul>

W	Matches a word character (letter, digit, or underscore)	<ul> <li>"1"</li> <li>"A"</li> <li>"1"</li> <li>"!" (no match)</li> <li>"" (no match)</li> </ul>
W	Matches any non-word character	<ul> <li>"1" (no match)</li> <li>"A" (no match)</li> <li>"_" (no match)</li> <li>"]"</li> <li>""</li> </ul>
\s\s	Matches any whitespace character, such as spaces and tabs	<ul> <li>"1" (no match)</li> <li>"A" (no match)</li> <li>"_" (no match)</li> <li>"!" (no match)</li> <li>""</li> </ul>

\S	Matches any non-whitespace character	<ul> <li>"1"</li> <li>"A"</li> <li>"1"</li> <li>"!"</li> <li>" (no match)</li> </ul>
	Character Set  Matches any characters inside the brackets. Can specify ranges of characters as well.	<ul> <li>"[A-C]"</li> <li>"B"</li> <li>"C"</li> <li>"D" (no match)</li> <li>"E" (no match)</li> </ul>
[^ ]	Negative Character Set  Matches anything not inside the brackets	<ul> <li>"[^C-E]"</li> <li>"A"</li> <li>"B"</li> <li>"C" (no match)</li> <li>"D" (no match)</li> <li>"E" (no match)</li> </ul>

	Wildcard  Matches any character (except a newline)	<ul> <li>"1"</li> <li>"A"</li> <li>"1"</li> <li>"1"</li> <li>"1"</li> </ul>
*	Matches 0 or more times	"ca*t"
+	Matches 1 or more times	"ca+t"

?	Matches 0 or 1 time	"ca?t"  • "ct"  • "cat"  • "caaat"  • "caaaat"
{#}	Matches a specific number of times	"ca{2}t"
{#,}	Matches at least a specific number of times	"ca{2,}t"

{#,#}	Matches within a specific range of times	"ca{2,3}t"
	Alternation  Matches either the expression before or the expression after	"catldog"  • "cat"  • "dog"  • "bird"
^	Start of the string	<ul> <li>"cat"</li> <li>"catsup"</li> <li>"concatenate" (no match)</li> <li>"kitty-cat" (no match)</li> </ul>

\$	End of the string	<ul> <li>"cat\$"</li> <li>"cat"</li> <li>"catsup" (no match)</li> <li>"concatenate" (no match)</li> <li>"kitty-cat"</li> </ul>
	Escape Character  Escapes the next character to be treated as a literal character	• "\$"
( )	Capture Group Identifies matches that should be extracted	"c(at)"  • "cat" ("at" is captured)  • "bat" (no match)
(?: )	Non-Capturing Group Identifies matches that should not be extracted	"c(?:at)"  • "cat" ("c" is captured)  • "bat" (no match)
(?! )	Negative Lookahead Group Identifies expressions that negate earlier matches	"cat(?! burglar)"  • "cat"  • "cats"  • "cat burglar" (no match)