Regex Reference

Character	Description	Example
[]	A set of characters	"[a-m]"
\	Signals a special sequence or escapes	"\d"
.	Any character except newline	"he..o"
^	Starts with	"^hello"
$	Ends with	"planet$"
*	Zero or more occurrences	"he.*o"
+	One or more occurrences	"he.+o"
?	Zero or one occurrence	"he.?o"
{}	Exact occurrences	"he.{2}o"
`	`	Either or
()	Capture and group	-

Special Sequences start with \ followed by a character:

Character	Description	Example
\A	Match if specified characters are at the beginning of the string	"\AThe"
\b	Match if specified characters are at the beginning or end of a word	r"\bain" r"ain\b"
\B	Match if specified characters are **not** at the beginning or end of a word	r"\Bain" r"ain\B"
\d	Match any digit (0-9)	"\d"
\D	Match any non-digit	"\D"
\s	Match any whitespace character	"\s"
\S	Match any non-whitespace character	"\S"
\w	Match any word character (letters, digits, and underscore _)	"\w"
\W	Match any non-word character	"\W"
\Z	Match if specified characters are at the end of the string	"Spain\Z"

Sets is a collection of characters enclosed in `[ ]`:

Set	Description	
`[arn]`	Match any of the specified characters	(e.g., a, r, or n)
`[a-n]`	Match any lowercase character between a and n	
`[^arn]`	Match any character **except** a, r, or n	
`[0123]`	Match any of the specified digits (0, 1, 2, or 3)	
`[0-9]`	Match any digit between 0 and 9	
`[0-5][0-9]`	Match any two-digit number from 00 to 59	
`[a-zA-Z]`	Match any character alphabetically between a and z, case-insensitive	
`[+]`	Match the literal + character (special characters lose their meaning in sets)	

Directive	Description	Example
%a	Weekday, short version	Wed
%A	Weekday, full version	Wednesday
%w	Weekday as a number (0-6, 0 is Sunday)	3
%d	Day of the month (01-31)	31
%b	Month name, short version	Dec
%B	Month name, full version	December
%m	Month as a number (01-12)	12
%y	Year, short version, without century	18
%Y	Year, full version	2018
%H	Hour (00-23)	17
%I	Hour (00-12)	05
%p	AM/PM	PM
%M	Minute (00-59)	41
%S	Second (00-59)	08
%f	Microsecond (000000-999999)	548513
%z	UTC offset	+0100
%Z	Timezone	CST
%j	Day number of the year (001-366)	365
%U	Week number of the year (Sunday as the first day)	52
%W	Week number of the year (Monday as the first day)	52
%c	Local version of date and time	Mon Dec 31 17:41:00 2018
%C	Century	20
%x	Local version of date	12/31/18
%X	Local version of time	17:41:00
%%	A % character	%
%G	ISO 8601 year	2018
%u	ISO 8601 weekday (1-7)	1
%V	ISO 8601 week number (01-53)	01