## Syntax

| | |
|---|---|
| . | Wildcard |
| ^ | Start of a string |
| $ | End of a string |
| x* | 0+ repetitions of x |
| x+ | 1+ repetitions of x |
| x? | 0-1 repetitions of x |
| x{m} | m repetitions of x |
| x{m,n} | m-n repetitions of x, greedy |
| x{m,n}? | m-n repetitions of x, non-greedy |
| x\|y | x OR y |
| [^x] | NOT x |
| \a | Literal 'a' |
| x*{int} | 'x*' must be int long |
| < x > < y > | Collocations of x and y |
| <x> (<y>) | Only returns y |

## Whitespace characters

| | |
|---|---|
| \n | newline |
| \s | space |
| \t | tab |
| \e | escape |
| \r | return |

## Functions

| | |
|---|---|
| search() | Somewhere in string |
| findall() | Somewhere in the string, non-overlapping |
| match() | Beginning of string |
| fullmatch() | Entire string |
| Arguments: pattern, string, <flag=0> | |

## Special escape characters

| | |
|---|---|
| \A | IS at start of string |
| \b | IS at wordbreak |
| \B | NOT at wordbreak |
| \d | IS [0-9] |
| \D | NOT [0-9] |
| \s | White space characters |
| \S | NOT white space characters |
| \w | IS Unicode word character [a-ZA-Z0-9_] |
| \W | NOT Unicode word character |
| \Z | IS at end of string |

## .format

| | |
|---|---|
| '{:n}'.format(x) | Prints x, padded with n whitespace |
| {:<n} | Left justified |
| {:>n} | Right justified |
| {:.nf} | Show n decimal places |
| '{:{width}}'.format('x', width=n) | |

## Hierarchy

| | | |
|---|---|---|
| 1 | Parenthesis | ( ) |
| 2 | Counters | * + ? { } |
| 3 | Sequences and anchors | ^ $ |
| 4 | Disjunction | \| |

## Flags

| | | |
|---|---|---|
| re.I | re.IGNORECASE | |
| re.M | re.MULTILINE | ^ $ match line boundaries |
| re.X | re.VERBOSE | Ignores whitespace |