


[< Learn These Shortcuts \(/app/dojos/python-regex\)](#)

## Python Regex Cheat Sheet

### Characters I

|    |                                    |
|----|------------------------------------|
| .  | Match any character except newline |
| ^  | Match the start of the string      |
| \$ | Match the end of the string        |
| *  | Match 0 or more repetitions        |
| +  | Match 1 or more repetitions        |
| ?  | Match 0 or 1 repetitions           |

### Special Sequences I

|    |   |
|----|---|
| \A | Match only at start of string                                       |
| \b | Match empty string, only at beginning or end of a word              |
| \B | Match empty string, only when it is not at beginning or end of word |
| \d | Match digits # same as [0-9]  |
| \D | Match any non digit # same as [^0-9]                                |

### Characters II

|               |  |
|---------------|--|
| *?            | Match 0 or more repetitions non-greedy               |
| +?            | Match 1 or more repetitions non-greedy               |
| ??            | Match 0 or 1 repetitions non-greedy                  |
| \             | Escape special characters                            |
| []            | Match a set of characters                            |
| [a-z]         | Match any lowercase ASCII letter                     |
| [lower-upper] | Match a set of characters from lower to upper        |
| [^]           | Match characters NOT in a set                        |
| A B           | Match either A or B regular expressions (non-greedy) |

### Special Sequences II

|    |  |
|----|--|
| \s | Match whitespace characters # same as [\t\n\r\f\v]     |
| \S | Match non whitespace characters #same as [^\t\n\r\f\v] |

|                 |   |
|-----------------|---|
| <code>\w</code> | Match unicode word characters # same as <code>[a-zA-Z0-9_]</code>                     |
| <code>\W</code> | Match any character not a Unicode word character # same as <code>[^a-zA-Z0-9_]</code> |
| <code>\Z</code> | Match only at end of string   |

## Characters III

|                     |   |
|---------------------|---|
| <code>{m}</code>    | Match exactly m copies  |
| <code>{m,n}</code>  | Match from m to n repetitions                                 |
| <code>{,n}</code>   | Match from 0 to n repetitions                                 |
| <code>{m,}</code>   | Match from m to infinite repetitions                          |
| <code>{m,n}?</code> | Match from m to n repetitions non-greedy (as few as possible) |

## RE Methods I

|  |   |
|--|---|
| <code>re.compile(pattern, flags)</code>    | Compile a regular expression of pattern, with flags                         |
| <code>re.match(pattern, string)</code>     | Match pattern only at beginning of string                                   |
| <code>re.search(pattern, string)</code>    | Match pattern anywhere in the string  |
| <code>re.split(pattern, string)</code>     | Split string by occurrences of pattern                                      |
| <code>re.sub(pattern, str2, string)</code> | Replace leftmost non-overlapping occurrences of pattern in string with str2 |

## Groups I

|                               |   |
|-------------------------------|---|
| <code>(match)</code>          | Use to specify a group for which match can be retrieved later       |
| <code>(?:match)</code>        | Non-capturing version parenthesis (match cannot be retrieved later) |
| <code>(?P&lt;name&gt;)</code> | Capture group with name "name"                                      |
| <code>(?P=name)</code>        | Back reference group named "name" in same pattern                   |
| <code>(?#comment)</code>      | Comment   |

## Match Objects I

|                                  |  |
|----------------------------------|--|
| <code>match.group("name")</code> | Return subgroup "name" of match                        |
| <code>match.groups()</code>      | Return tuple containing all subgroups of match         |
| <code>match.groupdict()</code>   | Return dict containing all named subgroups of match    |
| <code>match.start(group)</code>  | Return start index of substring match by group         |
| <code>match.end(group)</code>    | Return end index of substring matched by group         |
| <code>match.span(group)</code>   | Return 2-tuple start and end indices of group in match |

## Flags I

|                  |  |
|------------------|--|
| <code>(?)</code> | Extension notation (used to set flags) |
| <code>a</code>   | ASCII-only matching flag               |

|          |                       |
|----------|-----------------------|
| <b>i</b> | Ignore case flag      |
| <b>L</b> | Locale dependent flag |
| <b>m</b> | Multi-line flag       |
| <b>s</b> | Dot matches all flag  |
| <b>x</b> | Verbose flag          |

## Lookahead / Behind I

|                           |  |
|---------------------------|--|
| <b>(?=match)</b>          | Lookahead assertion - match if contents matches next, but don't consume any of the string. |
| <b>(?!match)</b>          | Negative lookahead assertion - match if contents do not match next                         |
| <b>(?&lt;=match)</b>      | Positive lookbehind assertion - match if current position in string is preceded by match   |
| <b>(?&lt;!match)</b>      | Negative lookbehind assertion - match if current position is not preceded by match         |
| <b>(?(id/name)yes no)</b> | Match "yes" pattern if id or name exists, otherwise match "no" pattern                     |

## Match Objects II

|                        |   |
|------------------------|---|
| <b>match.pos</b>       | Value of pos which was passed to search() or match()              |
| <b>match.endpos</b>    | Value of endpos which was passed to search() or match()           |
| <b>match.lastindex</b> | Integer index of last matched capturing group                     |
| <b>match.lastgroup</b> | Name of last matched capturing group                              |
| <b>match.re</b>        | The regular expression who match() or search() created this match |
| <b>match.string</b>    | The string passed to match() or search()                          |

## RE Methods II

|                                       |  |
|---------------------------------------|--|
| <b>re.fullmatch(pattern, string)</b>  | Match pattern if whole string matches regular expression   |
| <b>re.findall(pattern, string)</b>    | Return all non-overlapping matches of pattern in string, as a list of strings                                |
| <b>re.finditer(pattern, string)</b>   | Return an iterator yielding match objects over non-overlapping matches of pattern in string                  |
| <b>re.subn(pattern, str2, string)</b> | Replace left most occurrences of pattern in string with str2, but return a tuple of (newstring, # subs made) |
| <b>re.purge()</b>                     | Clear the regular expression cache   |

[< Learn These Shortcuts \(/app/dojos/python-regex\)](/app/dojos/python-regex)

