9/13/2016

|  |  |
| --- | --- |
| Construct | Description |
| [abc] | a, b, or c (simple class) |
| [^abc] | Any character except a, b, or c (negation) |
| [a-zA-Z] | a through z, or A through Z, inclusive (range) |
| [a-d[m-p]] | a through d, or m through p: [a-dm-p] (union) |
| [a-z&&[def]] | d, e, or f (intersection) |
| [a-z&&[^bc]] | a through z, except for b and c: [ad-z] (subtraction) |
| [a-z&&[^m-p]] | a through z, and not m through p: [a-lq-z] (subtraction) |

|  |  |
| --- | --- |
| Construct | Description |
| . | Any character (may or may not match line terminators) |
| \d | A digit: [0-9] |
| \D | A non-digit: [^0-9] |
| \s | A whitespace character: [ \t\n\x0B\f\r] |
| \S | A non-whitespace character:[^\s] |
| \w | A word character: [a-zA-Z\_0-9] |
| \W | A non-word character: [^\w] |

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|  |  |  |  |
| --- | --- | --- | --- |
| Greedy | Reluctant | Possessive | Meaning |
| X? | X?? | X?+ | X, once or not at all |
| X\* | X\*? | X\*+ | X, zero or more times |
| X+ | X+? | X++ | X, one or more times |
| X{n} | X{n}? | X{n}+ | X, exactly n times |
| X{n,} | X{n,}? | X{n,}+ | X, at least n times |
| X{n,m} | X{n,m}? | X{n,m}+ | X, at least n but not more than m times |