Causes the resulting RE to match 1 or more repetitions of the preceding RE.

ab+ will match ‘a’ followed by any non-zero number of ‘b’s; it will not match just ‘a’

Matches the start of the string

matches = re.search(r'^[0-9]+\.[0-9]+\.[0-9]+\.[0-9]+$', ip)

Used to indicate a set of characters.

Matches the end of the string

Escapes special characters (permitting you to match characters like '\*', '?', etc..)

.

(Dot.) In the default mode, this matches any character except a newline.

\*

Causes the resulting RE to match 0 or more repetitions of the preceding RE, as many repetitions as are possible. ab\* will match ‘a’, ‘ab’, or ‘a’ followed by any number of ‘b’s.

+

Causes the resulting RE to match 1 or more repetitions of the preceding RE. ab+ will match ‘a’ followed by any non-zero number of ‘b’s; it will not match just ‘a’.

?

Causes the resulting RE to match 0 or 1 repetitions of the preceding RE. ab? will match either ‘a’ or ‘ab’.

\d

Matches any decimal digit; this is equivalent to the class [0-9].

\D

Matches any non-digit character; this is equivalent to the class [^0-9].

\s

Matches any whitespace character; this is equivalent to the class [ \t\n\r\f\v].

\S

Matches any non-whitespace character; this is equivalent to the class [^ \t\n\r\f\v].

\w

Matches any alphanumeric character; this is equivalent to the class [a-zA-Z0-9\_].

\W

Matches any non-alphanumeric character; this is equivalent to the class [^a-zA-Z0-9\_].