Extended Regular Expressions

Elementary Operations

single characters
except "\ $. ^ [ ] - ? * + ( ) / { } % < >

concatenation (put characters together)

alternation (a|b|c)
[ab] == a|b
[a-k] == a|b|c|...|i|j|k
[a-z0-9] == any letter or digit
[^a] == any character but a

. matches any character except the newline
* -- Kleene Closure
+ -- Positive Closure

Examples:
[0-9]+\.[0-9]++

note: without the quotes it could be any character
[ \t]+ -- is whitespace

(\t) -- is a blank space character before the \t

Special Characters:
.
-- matches any single character (except newline)
\ -- quote the part as text
\t -- tab
\n -- newline
\b -- backspace
\" -- double quote
\\ -- \ \\
? -- this means the preceding was optional
ab? == a|ab
(ab)? == ab|e

^ -- means at the beginning of the line (unless it is inside of a [ ])
$ means at the end of the line, same as \n
[^ ] -- means anything except
\"[^\"]*\" is a double quoted string
{n,m} -- n through m occurrences
a{1,3} is a or aa or aaa

{varName} -- translation of varName from definition
/ -- matches only if followed by right part of /
0/1 means the 0 of 01 but not 02 or 03 or …
( ) -- grouping