

1. Page 106, Problem 1

id

open paren

close paren

open bracket

const type id

type id

type id

operation integer

while

open paren

id operation integer

close paren

open bracket

id

operation

operation

close bracket

close bracket

2. Page 106, Problem 4

a) $(a \mid (bc)^* d)^+$

	a	b	c	d
1	3	2		4
2			3	
3		2		4
*4	4	2		4

b) $((0|1)^*(2|3)^+ \mid 0011)$

	0	1	2	3
1	2	6	7	7
2	3	6	7	7
3	6	4	7	7
*4	6	5	7	7
5	6	6	7	7
6	6	6	7	7
*7	6	6	7	7

c) $(a \text{ Not}(a))^*aaa$

	a	Not(a)
1	2	
2	3	1
3	4	
*4		

3. Page 110, Problem 19

No; If the original set ends with a * or + and Rev(R) reverses the sequence of characters, then that means that * or + would be at the beginning of the new sequence and thus be in an invalid set.

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I would change my code so that it compares strings, it would actually be comparing each string character by character and if it matches the string from the IGNORE list then it would be told to not print it. Basically it would ignore the tail ends of the word.

Example:

IGNORE file has:

cat
walk

stdin has:

cats
fish
walking
walked
dog

output has:

fish
dog