

A.A. Do Exercise 8.4 (about closure properties of  $PSPACE$ ).

A.B. Is  $PSPACE$  closed under concatenation? (Exercise 8.4 asks about other closure properties, but not this one.)

The space complexity class  $L$  consists of all problems that can be solved in logarithmic space. To make such a concept meaningful, we have to ignore the space used to store the input. For a precise definition of  $L$ , see Section 8.4 of our textbook. We will now do an enhanced version of Problem 8.17.

B.A. Deciding whether a string of parentheses is a valid nest is one of our classic PDA problems. How much stack space did our PDA solution use?

B.B. Solve Problem 8.17 (about valid parenthesis nests).

I used to assign Problem 8.8 (about  $EQ_{REG}$ ). I'm not assigning it this time, but it's good practice.