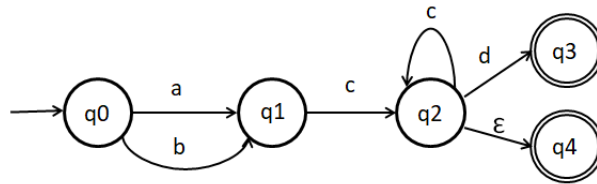
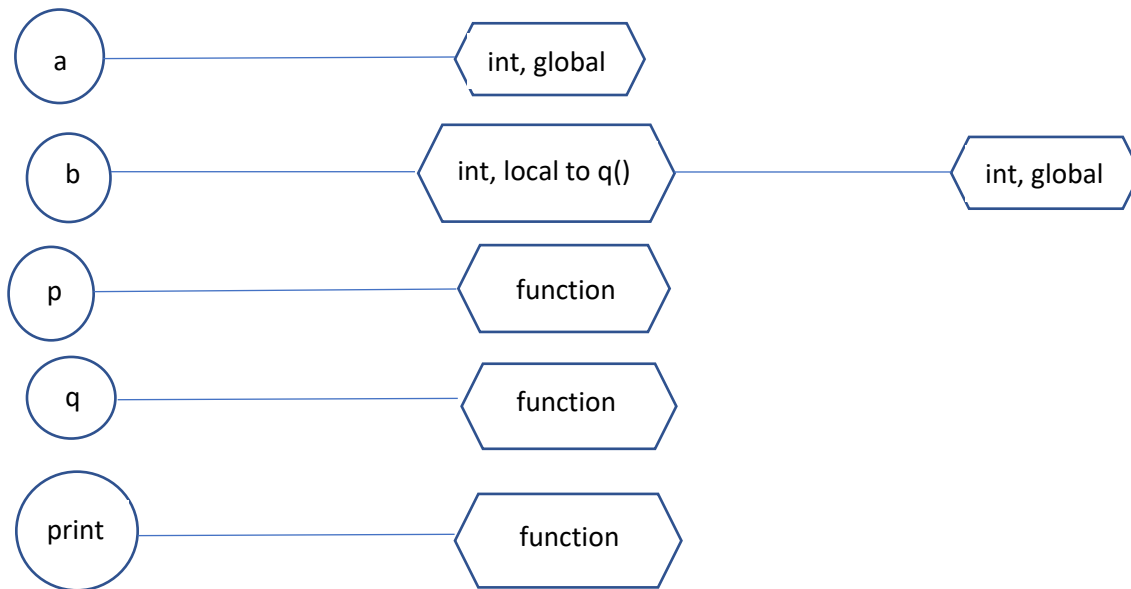


CS 571 Assignment #2

1. Draw an automaton that accepts the regular expression $(a|b)(c^+d?)$



2a. Draw the symbol table for the following C program at point 1 using static scoping.



2b. What does the program print using static scoping?

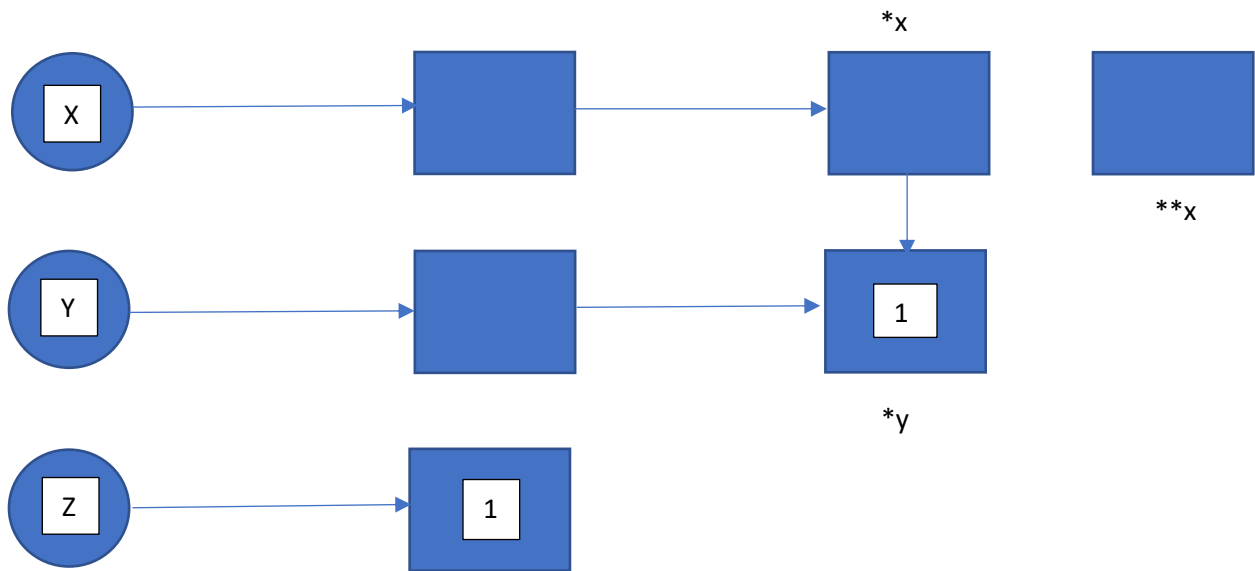
4
3

2c. What does the program print using dynamic scoping?

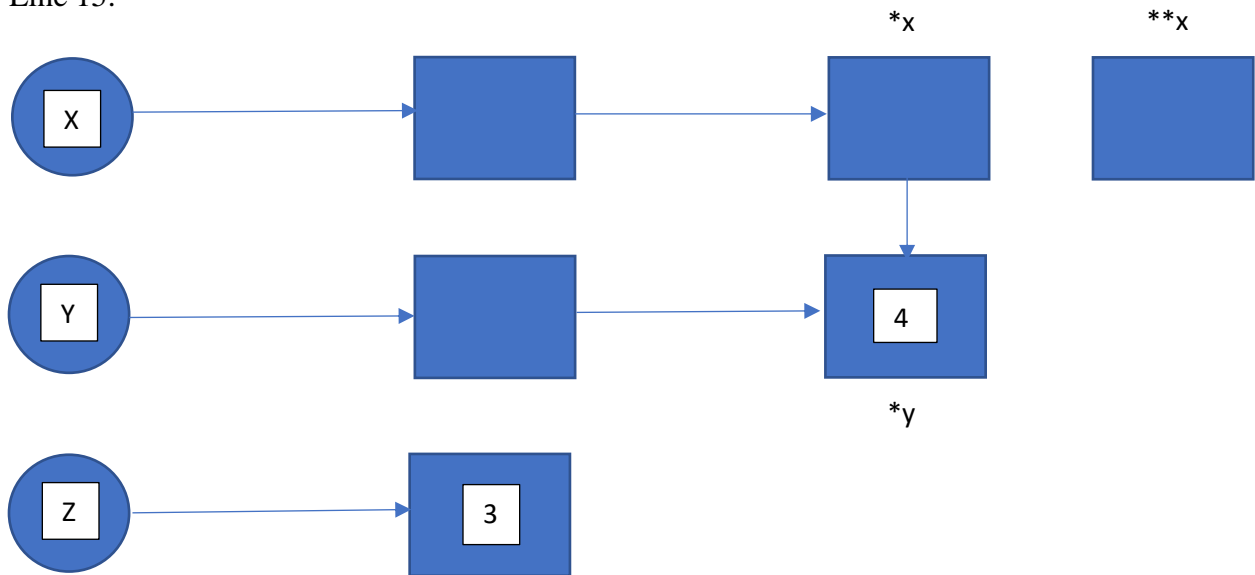
4
5

3. Draw box-and-circle diagrams of variables after each of the two assignments to `**x` (Lines 11 and 15). What does the program print?

Line 11 (next page):



Line 15:



Prints:

1
1
3

4a. Give the output of the program using call-by-reference.

1 2 1 0

2 0 0

4b. Give the output of the program using call-by-name.

0 2 1 2

0 1 2