

Exercises: Tries

Warning: The hard deadline has passed. You can attempt it, but **you will not get credit for it**. You are welcome to try it as a learning exercise.

To specify an array or sequence of values in an answer, you must separate the values by a single space character (with no punctuation and with no leading or trailing whitespace). For example, if the question asks for the first ten powers of two (starting at 1), the only accepted answer is:

1 2 4 8 16 32 64 128 256 512

If you wish to discuss a particular question and answer in the forums, please post the entire question and answer, including the seed (which is used by the course staff to uniquely identify the question) and the explanation (which contains the correct answer).

☐ In accordance with the Coursera Honor Code, I (Atul Gupta) certify that the answers here are my own work.

Question 1

(seed = 369735)

Suppose that you insert the following sequence of 7 strings into a multiway trie:

12 33 223 112 221 2113 31

How many (non-null) nodes does the resulting trie contain (including the root node)?

Question 2

(seed = 698732)

Suppose that you insert the following sequence of 7 strings into a ternary search trie:

215 412 114 434 421 514 134

What are the depths of the nodes corresponding to the last characters in the 7 strings (in the order the strings were inserted)? Recall: the depth of the root node is 0.

	0	1	2	3	4	5	6
key	215	412	114	434	421	514	134
depth							

☐ In accordance with the Coursera Honor Code, I (Atul Gupta) certify that the answers here are my own work.

Submit Answers

Save Answers

You cannot submit your work until you agree to the Honor Code. Thanks!