

COS126 Binary Search Tree Exercises 4.4

(answers on reverse side)

4.4.8. Draw the BST that results when you insert items with keys

E A S Y Q U E S T I O N

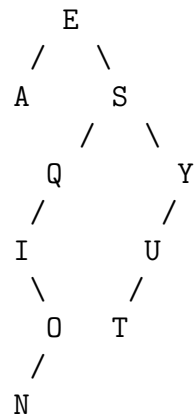
in that order into an initially empty tree.

4.4.9. Suppose we have int values between 1 and 1000 in a BST and search for 363. Which of the following cannot be the sequence of keys examined.

- (a) 2 252 401 398 330 363
- (b) 399 387 219 266 382 381 278 363
- (c) 3 923 220 911 244 898 258 362 363
- (d) 4 924 278 347 621 299 392 358 363
- (e) 5 925 202 910 245 363

Answers:

4.4.8.



4.4.9. Draw the BST as if you were tracing the keys in the order given. (d) cannot be the sequence of keys examined because 299 cannot appear after 621, because that would place it to the right of 347.