

[320] Graph Search

Yiyin Shen

Review

Assume this insertion order for a BST: **25, 24, 21, 4, 3, 2, 11**

Draw the tree:

Review

Assume this insertion order for a BST: 25, 24, 21, 4, 3, 2, 11

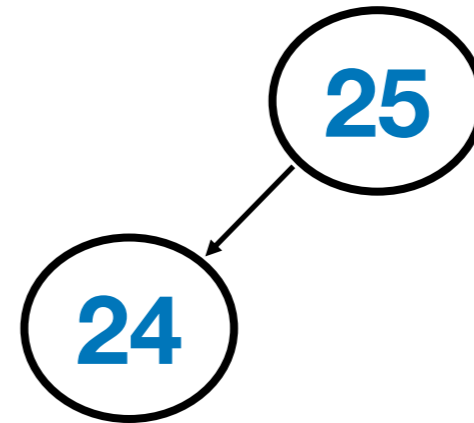
Draw the tree:



Review

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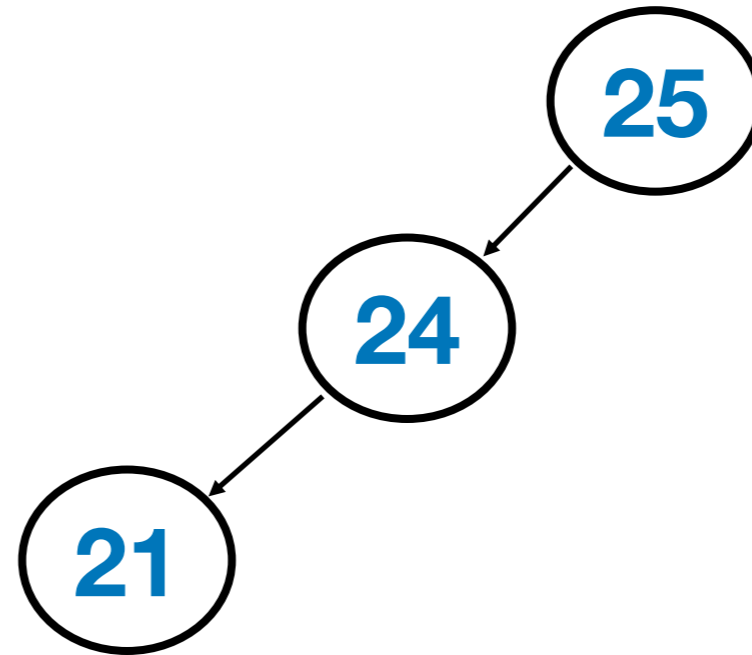
Draw the tree:



Review

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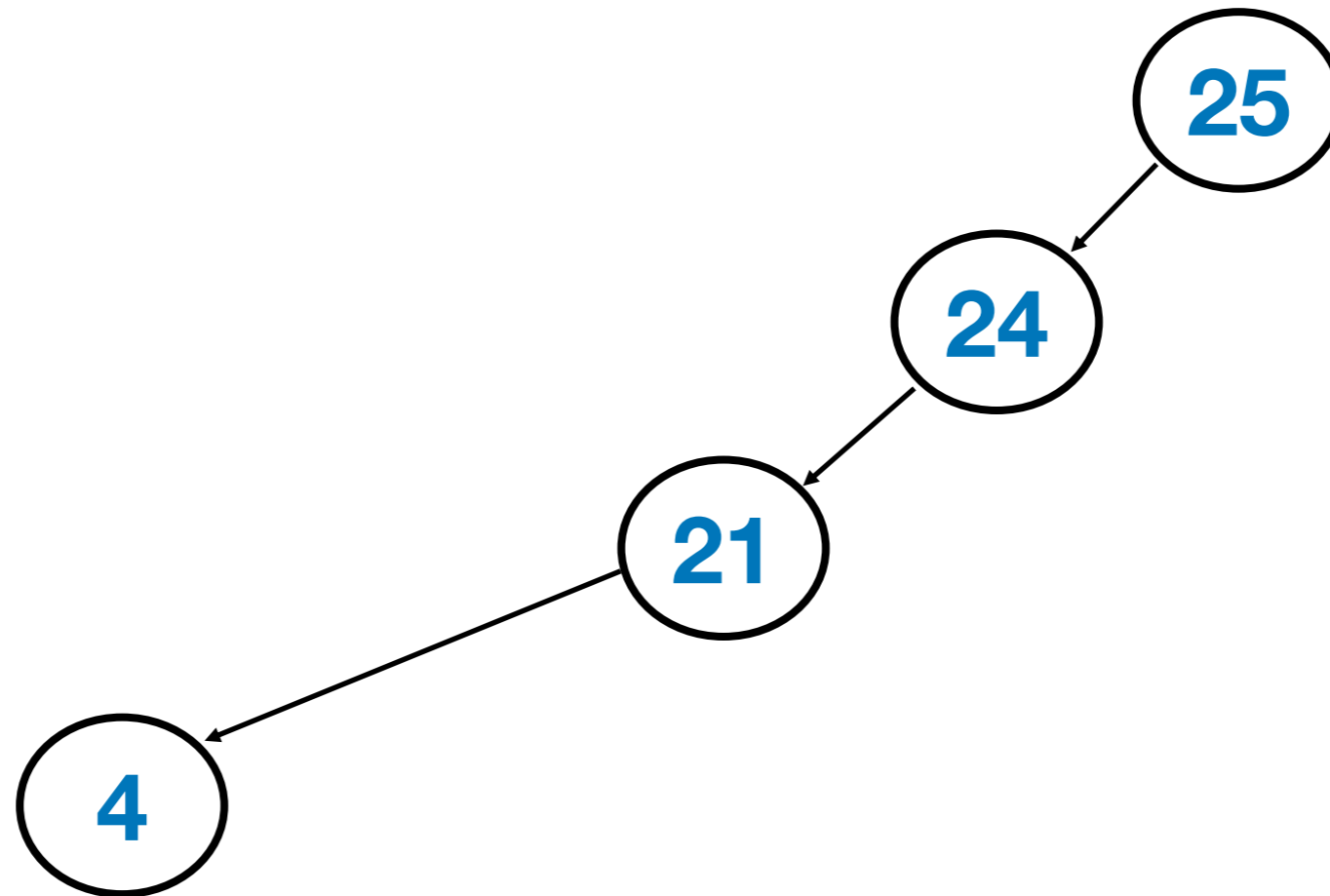
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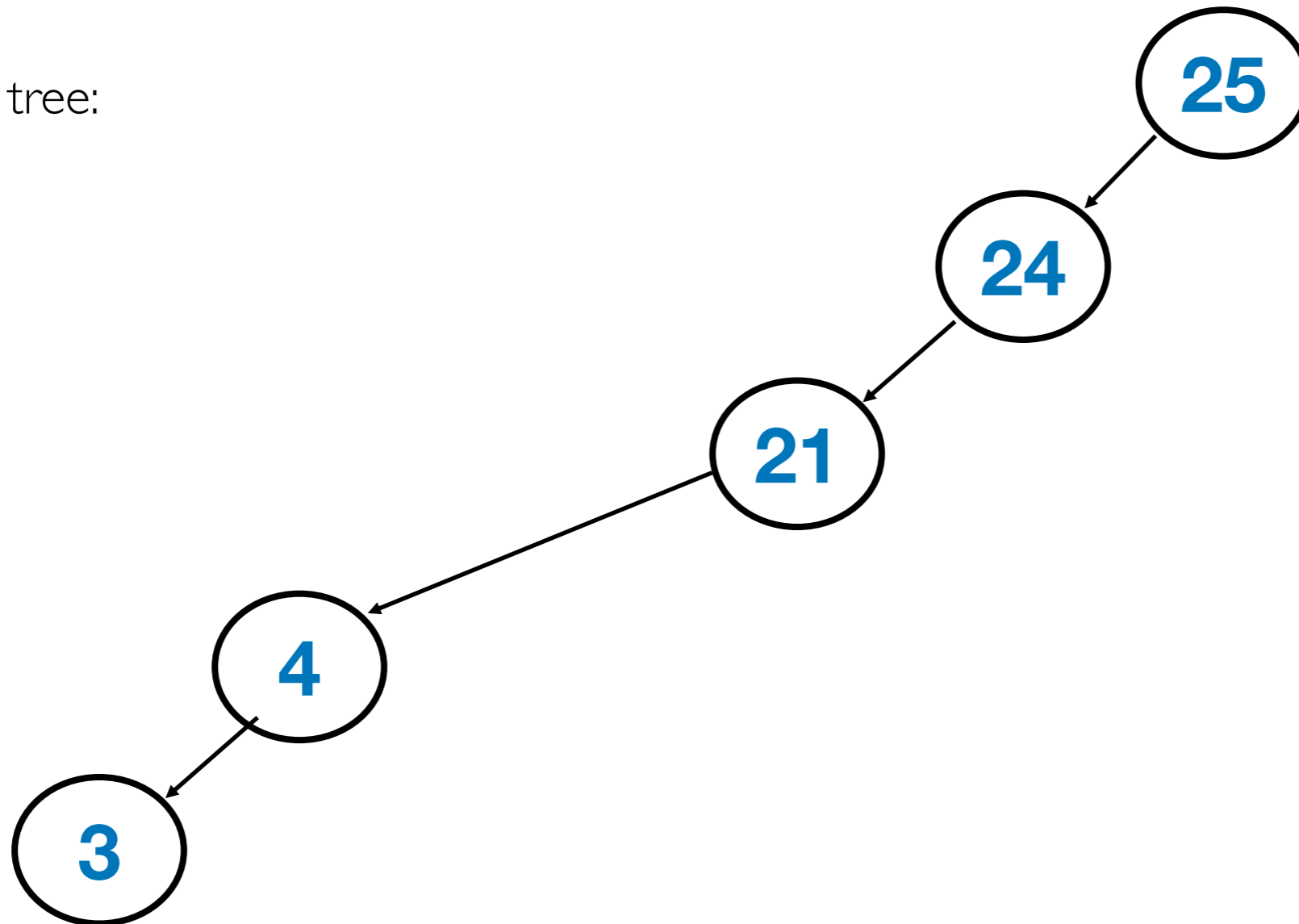
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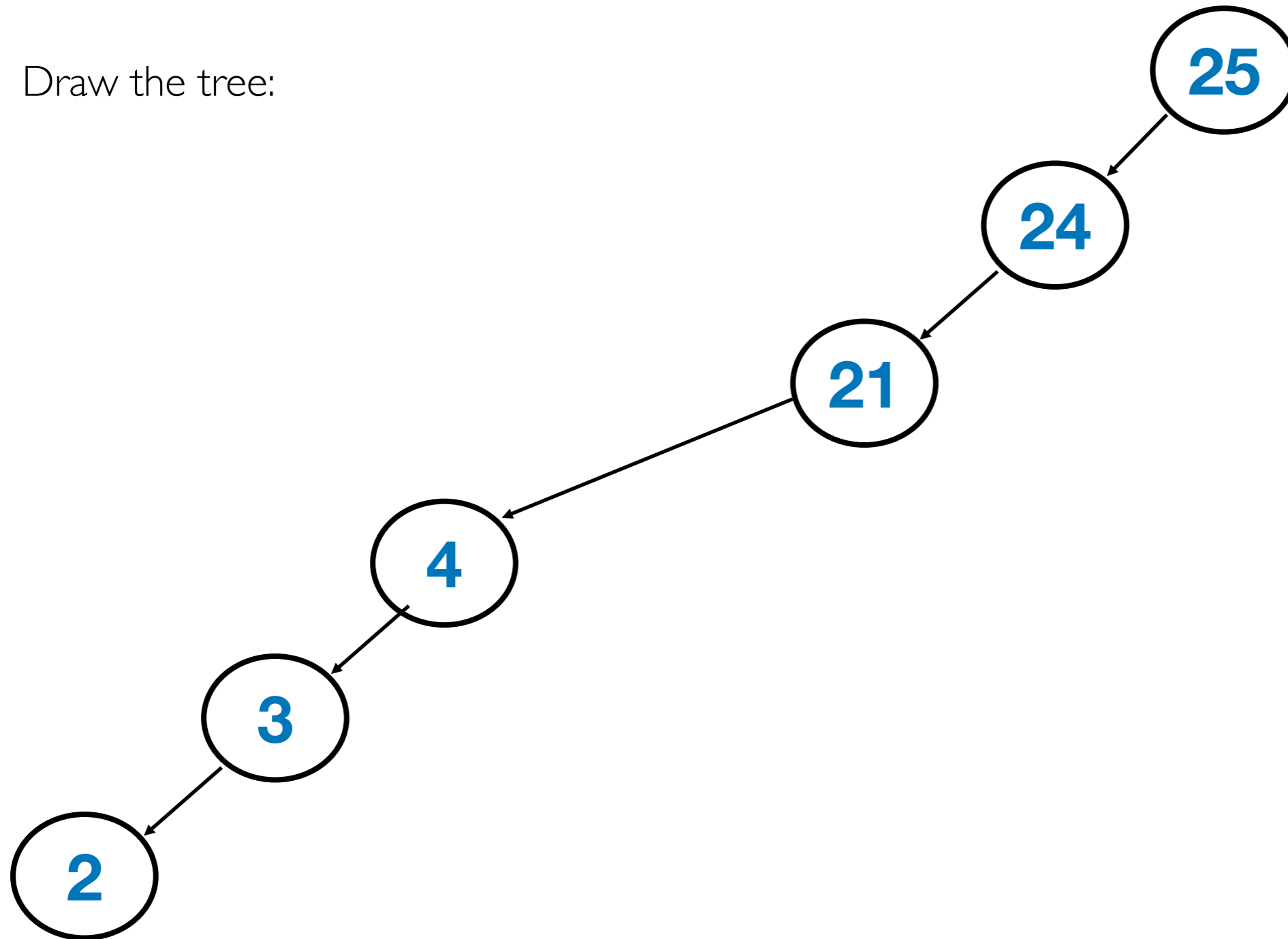
Draw the tree:



Review

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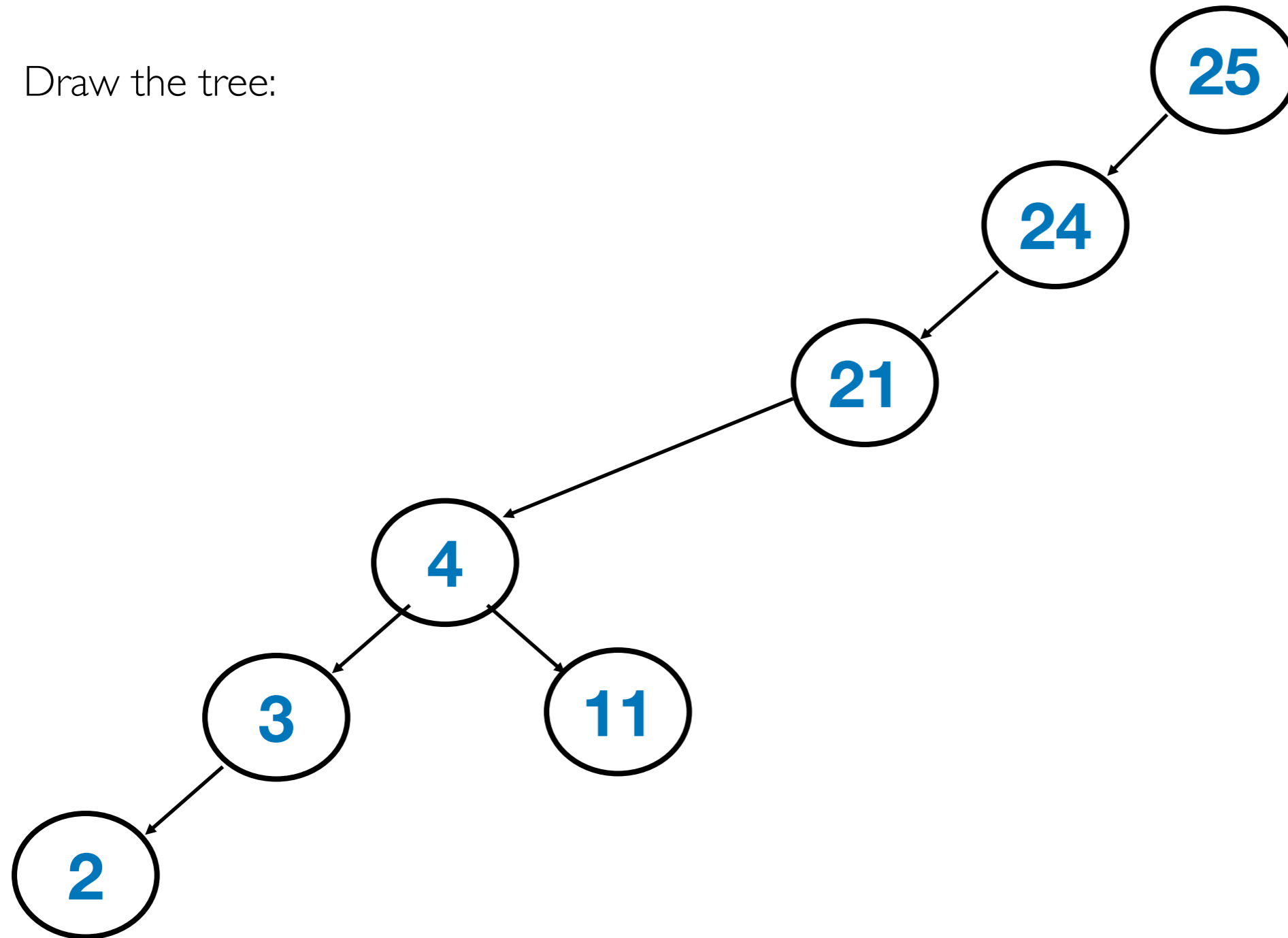
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Review

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Draw the tree:

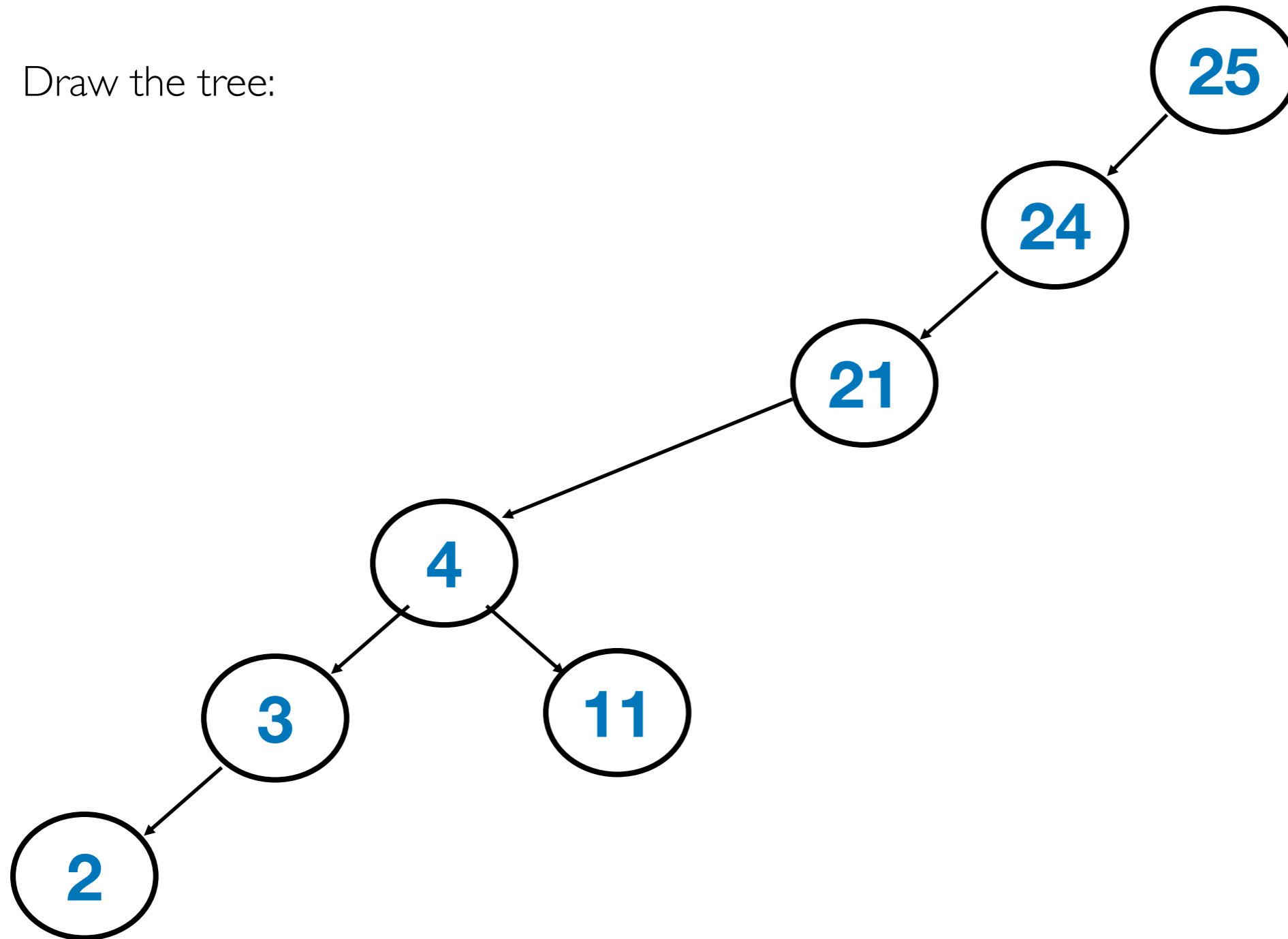


Review

would have probably been more balanced if insert order randomized

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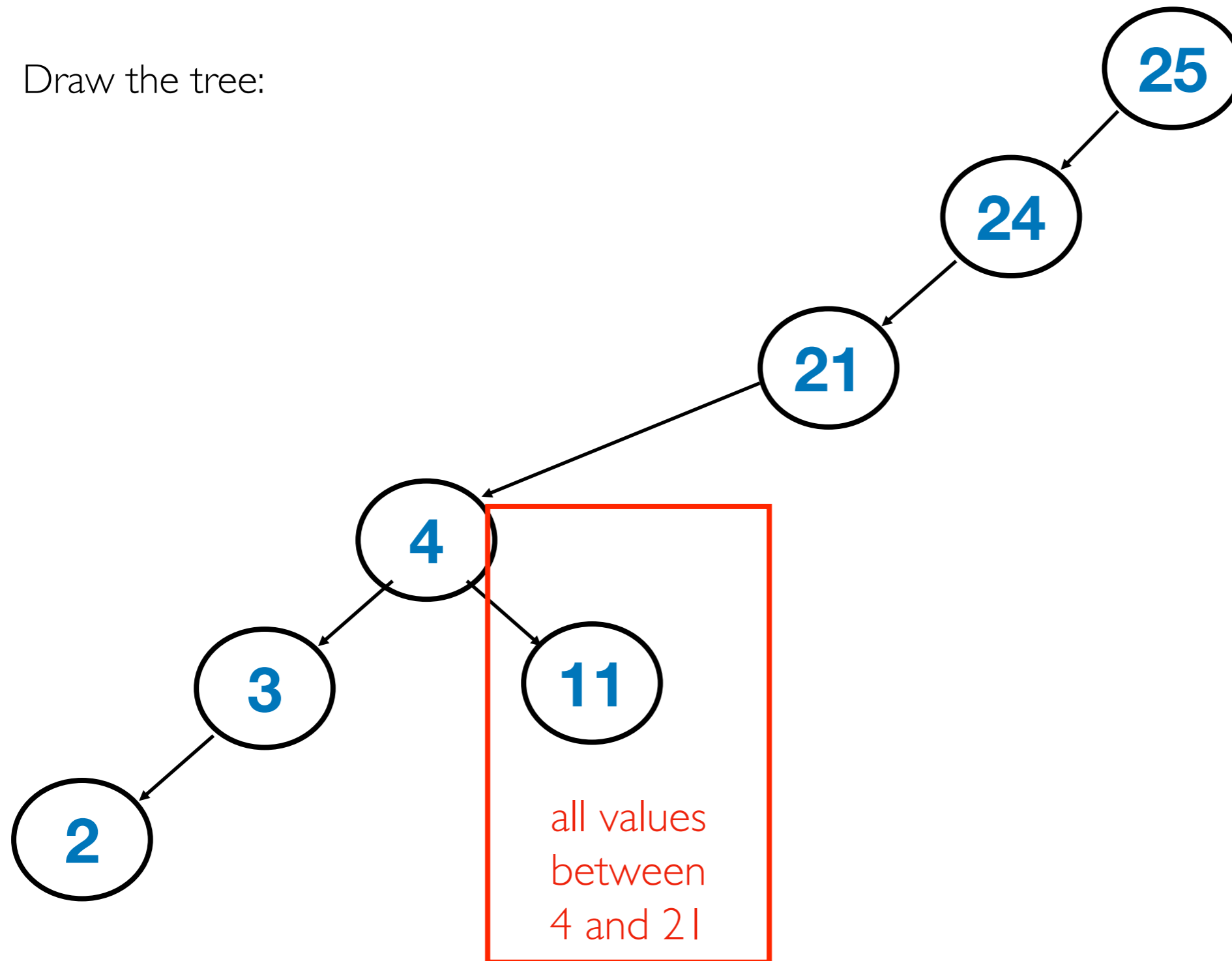
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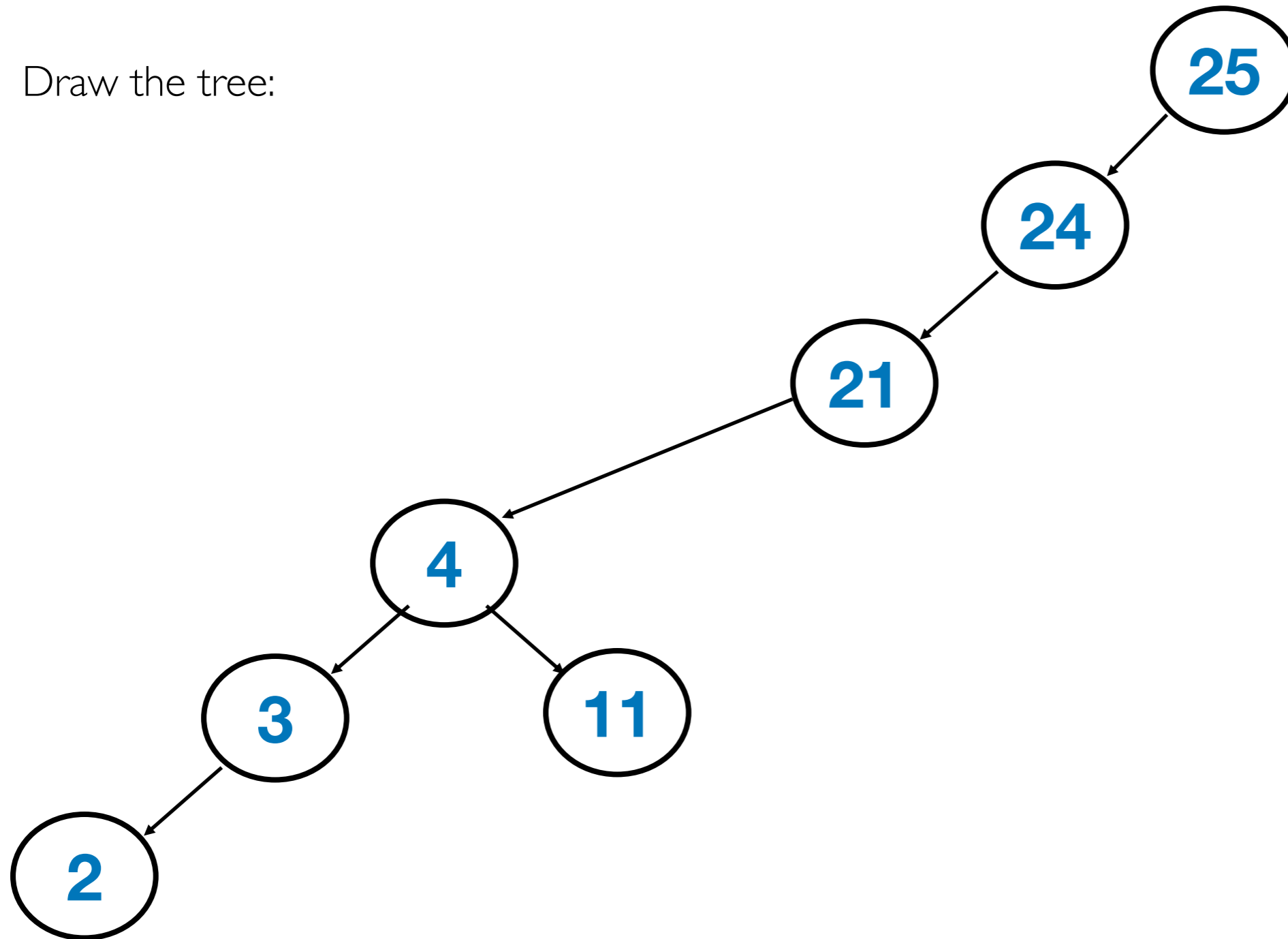
Draw the tree:



Review

Which nodes will be checked if we're searching for 22?

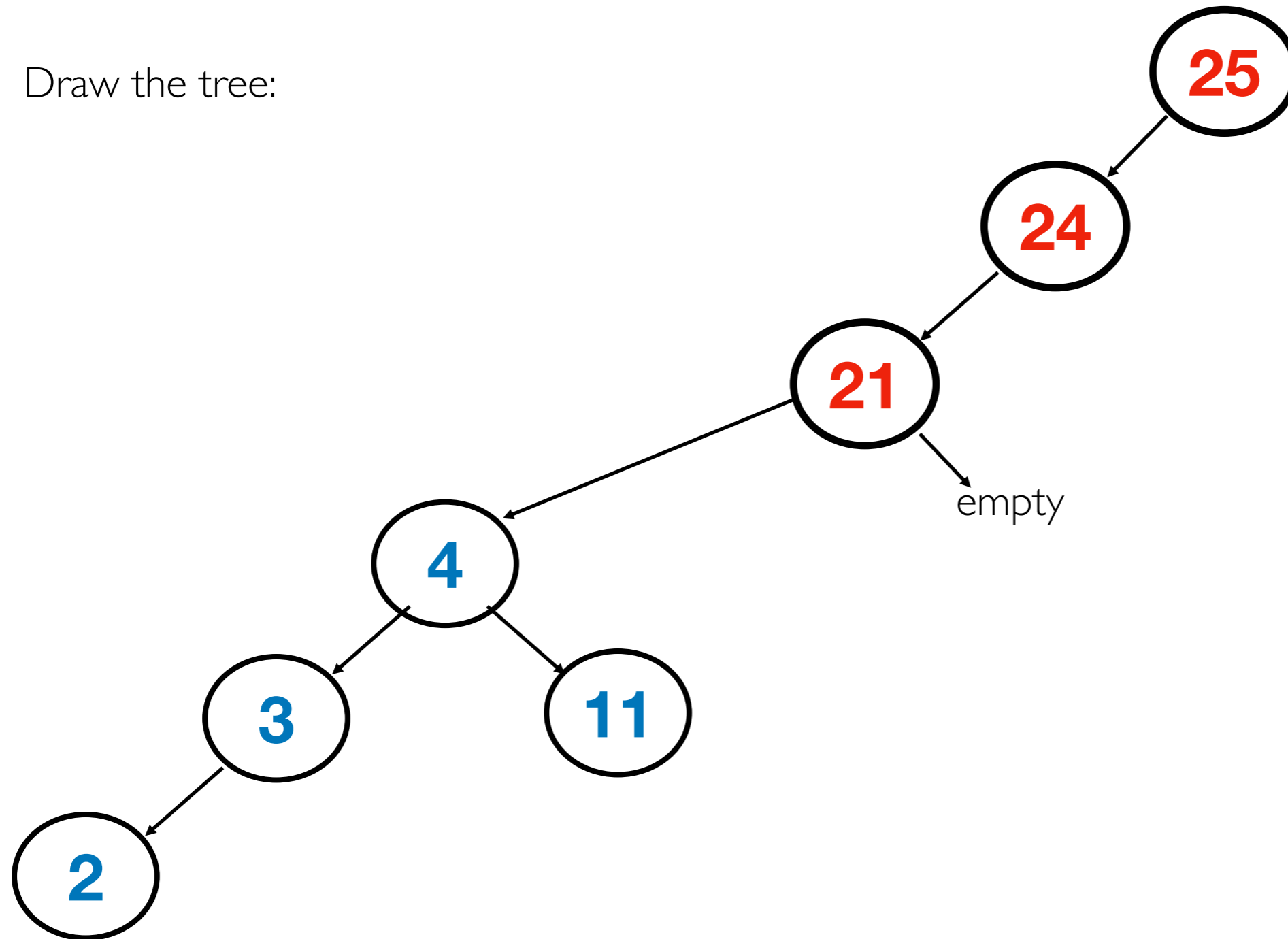
Draw the tree:



Review

Which nodes will be checked if we're searching for 22?

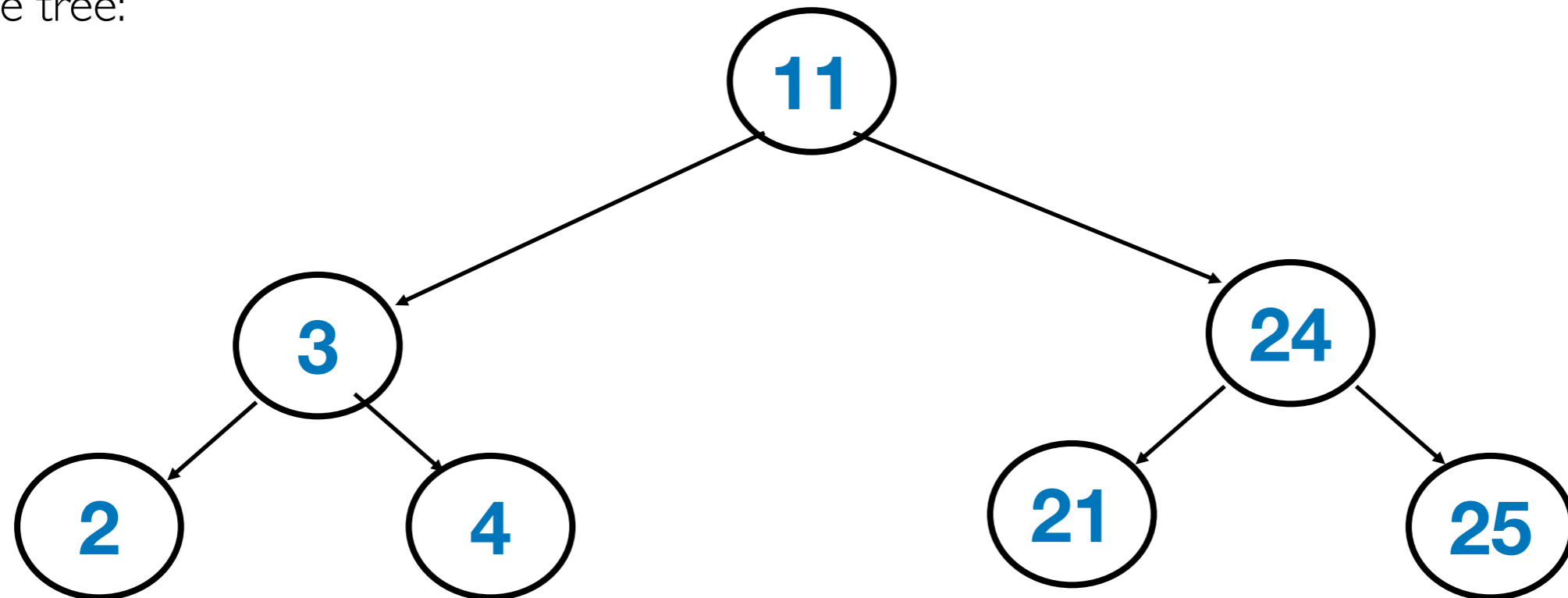
Draw the tree:



Review

Write down a few insertion order that will produce a balanced tree...

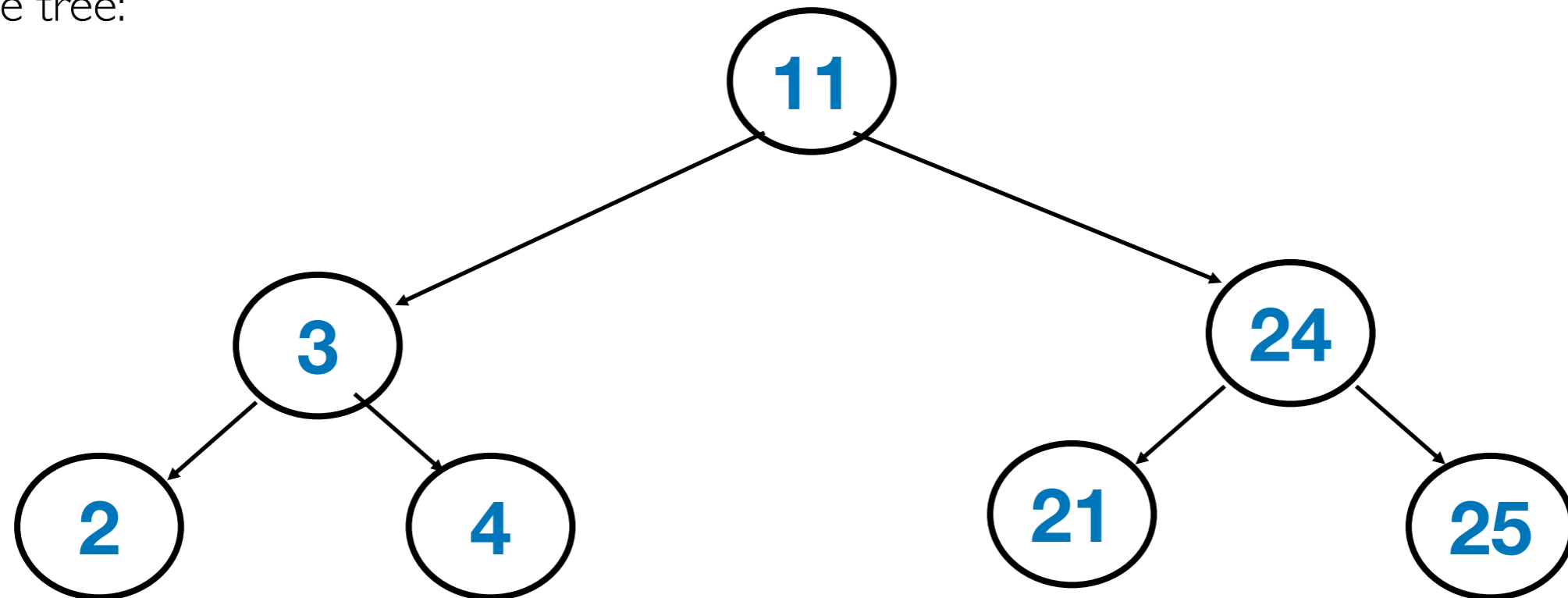
The tree:



Review

Write down a few insertion order that will produce a balanced tree...

The tree:



11, 3, 24, 2, 4, 21, 25