Java  $\rightarrow$  Implementation of basic algorithms  $\rightarrow$  Trees in Java

## Trees in Java → The pre-order traversal

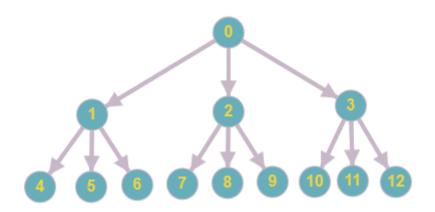
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Hard (9 11 minutes ?)

Code Challenge — Write a program

A full ternary tree with depth n is given. Write a program that prints all nodes of the tree in Pre-Order. Enumeration starts from 0 and goes sequentially through the levels. In the picture below you can see a tree with depth 2.

Pre-order for *k*-ary tree is (Root, Child\_1, ...., Child\_k).



**Input: n** - the depth of the tree.

Output: Sequence of nodes in Pre-Order, divided by spaces.

## Sample Input 1:

## Sample Output 1:

0 1 4 5 6 2 7 8 9 3 10 11 12

**Code Editor** <u>IDE</u>



opened

If you don't see your IDE opened, switch to it

manually

## ✓ Correct

[+] Test #1. OK

[+] Test #2. OK

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Use recursion to create complete tree and u then u are 95% done.

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