Homework #8. Trees

Theory to fasten:

- Tree is a special graph: oriented, not oriented.
- Tree and node metrics: degree, level, height. Subtree.
- Ordered trees: Fibonacci, Binomial, k-ary.
- K-ary (2-ary) tree implementation: linked node, array-based.
- Tree traversal.
- Visitor pattern.

Practical part

1) Implement generic **k**-ary **array-based** tree `MyTree<E>` class that will accept tree degree (k) in a constructor:

```
public MyTree(int degree) { ... }
```

2) Implement traversal methods for this tree.
3) *Build arithmetic expression parser (recursive descent parser) that will produce a binary tree from expression.
4) Calculate this expression using post-order traversal:

20 + 15 - 10 * 29

(if (3) is not done you can build this tree)