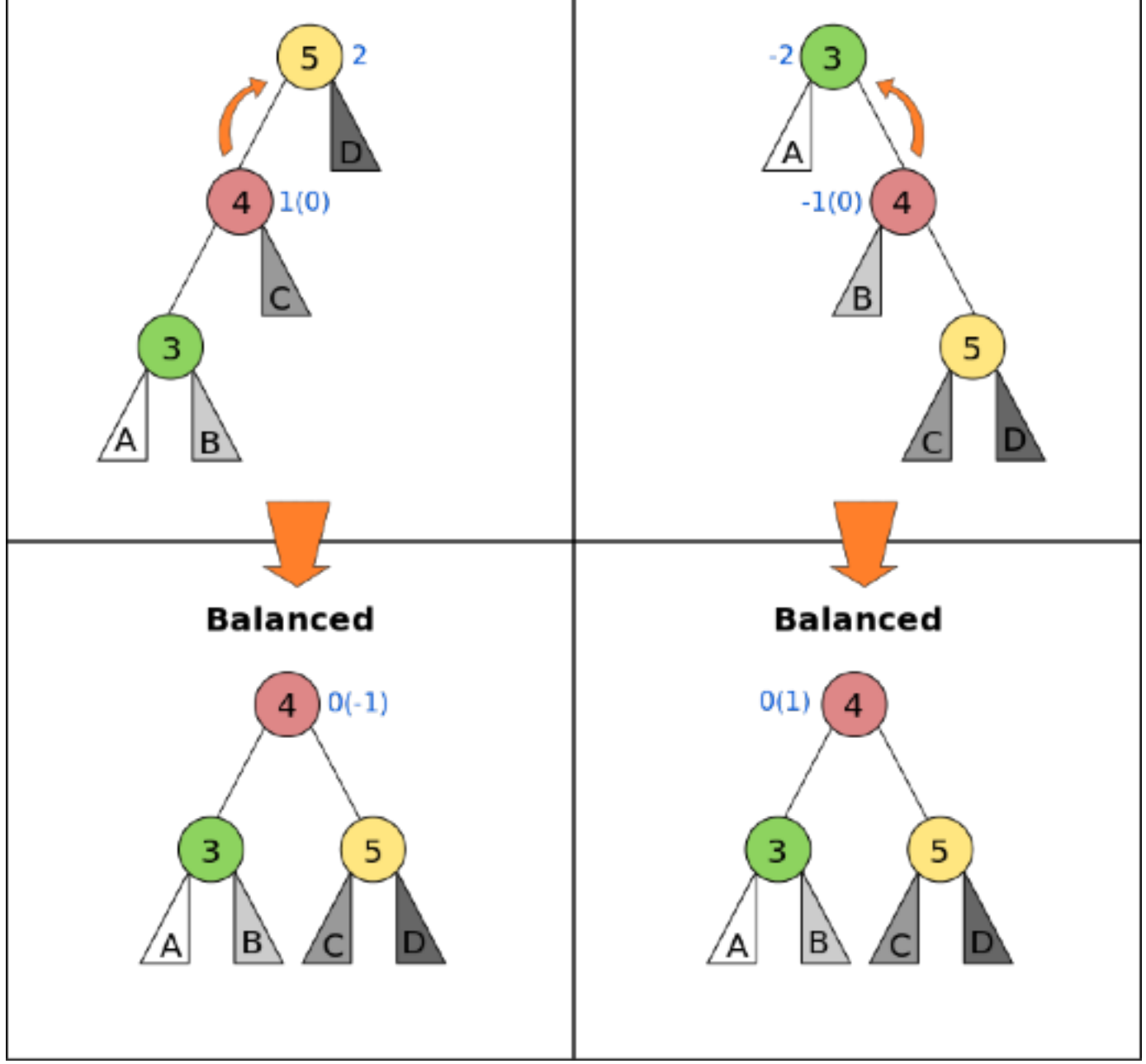

- if a tree becomes unbalanced, when a node is inserted into the right subtree of the right subtree, then we perform a single left rotation
- if a node is inserted in the left subtree of the left subtree. The tree then needs a right rotation
- double rotations are also performed

- https://www.hackerrank.com/challenges/self-balancing-tree/problem
- https://www.tutorialspoint.com/data_structures_algorithms/avl_tree_algorithm.htm

Digraphs

- It is a well-represented generalisation of a tree
- A digraph is a graph consisting of vertices and edges such that each of the edge present has a direction (directed edge)
- A directed graph (digraph) may either be:
  - Directed Cyclic Graph (DCG)
  - Directed Acyclic Graph (DAG)
- Trees are always DAGs