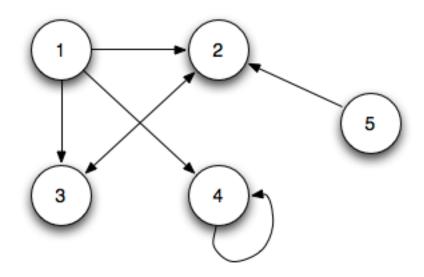
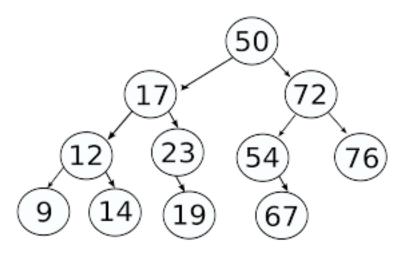
## Digraphs

- 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





## Heaps

- A Heap is a special Tree-based data structure in which the tree is a complete binary tree.
- Generally, Heaps can be of two types:
  - Max-Heap: In a Max-Heap the key present at the root node must be greatest among the keys present at all of it's children.
  - Min-Heap: In a Min-Heap the key present at the root node must be minimum among the keys present at all of it's children.
- The same property must be recursively true for all sub-trees in that binary tree.

