Graphs and Trees

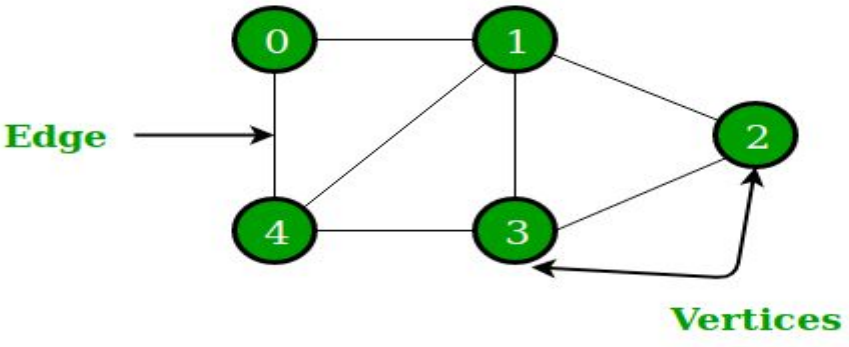
Graph

A graph is a collection of two sets V and E where V is a finite non-empty set of vertices and E is a finite non-empty set of edges. Vertices are nothing but the nodes in the graph. Two adjacent vertices are joined by edges.

Any graph is denoted as

G = {V, E}

Example



TREES

A tree is a finite set of one or more nodes such that there is a specially designated node called root.
The remaining nodes are partitioned into n>=0 disjoint sets T1, T2, T3, …, Tn

where T1, T2, T3, …, Tn is called the subtrees of the root

Example