Simple graphs. Conditions for simple graphs

1. No loops. That is. Edge cannot have a word is with itself. Or vertex cannot have an edge with itself.
2. There cannot be more than one edge between two vertices.
3. It has to be undirected that is it can traverse from one vertex is to another over an edge in a bi directional manner.
4. Has to be unweighted, That is, all the edges have a weight of equal to 1.

Directed graphs are basically simple graph, but in this case we have a directional flow in them, that is, it flows in One Direction.

Weighted Graphs are similar to simple graphs, but this time it has edges have weights more than equal to 1, so it can be also considered as two vertices having multiple edges that are equal to 1.

Cyclic graphs are graphs where loop can be formed between several vertices or. Where there are multiple ways to traverse from 1 vertex to another.

Acyclic graphs are graphs where loops cannot be found and there is only one way to traverse from 1 vertex to another.

A complete graph is an underrated graph where every vertex is coming disconnected to another through an unique edge.

A null Graph is a undirected graph with no edges. i.e. None of the vertices are connected together.

A connected graph is the graph where there is a path between any two vertices, in other words. It is a graph where any two points are connected.

Are disconnected graph is a graph that where there are at least two vertices that are not connected to each other.

A sub graph is a specific part of the main graph.

An edge disjoint sub graph is where two subgraphs do not have any common Vertices.