**Symmetrize**

**Description**

Sometimes we need to turn a directed network into an undirected one. This operation is called *symmetrize*. There are many ways to symmetrize, specially if you have a weighted network. Here we present the most simple ones.

**Parameters**

- **Treat graph as a matrix (instead of an edgelist)** will be treated as zero or the empty string. Any edges set to entirely zero or the empty string will be removed.
- **Symmetrize by Maximum (max)** When you symmetrize by maximum you consider each edge and replace its value for the direction which is higher. For example, let us say that the edge (Mark,Peter) has a value of 3 and (Peter,Mark) has a value of 2. Here you will replace both these edges by an undirected edge with a value of 3. In the case of a simple graph (no weights) the algorithm turns every directed edge into an undirected one.
- **Symmetrize by Minimum (min)** When you symmetrize by minimum you consider each edge and replace its value for the direction which is lower. For example, let us say that the edge (Mark,Peter) has a value of 3 and (Peter,Mark) has a value of 2. Here you will replace both these edges by an undirected edge with a value of 2. In the case of a simple graph (no weights) the algorithm removes all unreciprocal links (removes all links that go only in one direction).

**Links**

- [Source Code]

**See Also**

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