

Node Indegree

Description

The *indegree* of a node of a directed network is the number of edges incoming to the node. The algorithm determines the indegree of all nodes (indegree sequence), which will be listed in the output file.

Pros & Cons

The network to analyze must be directed, otherwise there are no special constraints.

Applications

Basic analysis tool, not particular for special disciplines or problems.

Implementation Details

The algorithm requires only one input, the file where the edges of the network are listed. A first read-in of the inputfile will set the values of the number of nodes and edges of the network. In the second read-in the indegrees of all nodes will be calculated. The program runs in a time $O(m)$, m being the number of edges of the network.

Links

- [Source Code](#)

Acknowledgements

The algorithm was implemented and documented by S. Fortunato, integrated by S. Fortunato and W. Huang.

References

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See Also



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