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Abstract:

Finding Critical Paths of a graph using topological ordering in DAG. Use the topological order given by the first algorithm for computing EC and the topological order given by the second algorithm for computing LC. Use the EC LC given by second algorithm and get Critical Edges. With Critical Edges construct Critical Path

Critical Path:

Longest sequence of activities in a project plan which must be completed on time for the project to complete on due date. An activity on the critical path cannot be started until its predecessor activity is complete; if it is delayed for a day, the entire project will be delayed for a day unless the activity following the delayed activity is completed a day earlier. [1]

Comparison of Result for various input.

Inputs	Time - In msec	Memory - in MB
in.txt	16	5/494
Pert.10.15	16	1/184
Pert.100.150	3	2/184
Pert.100.500	47	3/184
Pert.1000.5000	78	15/184
Path with multiple Paths	31	2/184

Reference:

http://www.businessdictionary.com/definition/critical-path.html - [1]