NAME
tred – transitive reduction filter for directed graphs

SYNOPSIS
tred [ files ]

DESCRIPTION
tred computes the transitive reduction of directed graphs, and prints the resulting graphs to standard output. This removes edges implied by transitivity. Nodes and subgraphs are not otherwise affected. The “meaning” and validity of the reduced graphs is application dependent. tred is particularly useful as a preprocessor to dot to reduce clutter in dense layouts.

Undirected graphs are silently ignored.

OPERANDS
The following operand is supported:

files Names of files containing 1 or more graphs in dot format. If no files operand is specified, the standard input will be used.

BUGS
Using bitmaps internally would substantially decrease running time.

DIAGNOSTICS
If a graph has cycles, its transitive reduction is not uniquely defined. In this case tred emits a warning.

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SEE ALSO
gc(1), dot(1), acyclic(1), gvpr(1), gvcolor(1), ccomps(1), sccmap(1), libgraph(3)