

NAME

`tred` – transitive reduction filter for directed graphs

SYNOPSIS

`tred [-ovr?] [files]`

DESCRIPTION

`tred` computes the transitive reduction of directed graphs, and prints the resulting graphs to a file or 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.

OPTIONS

The following options are supported:

-o FILE

Redirect output to the given file. By default, output goes to stdout.

-v Verbose output to stderr.

-r Print information of removed edges to stderr.

-? Print usage information.

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)`