NAME

gc – count graph components

SYNOPSIS

gc [**–necCaDUrsv?**] [*files*]

DESCRIPTION

gc is a graph analogue to **wc** in that it prints to standard output the number of nodes, edges, connected components or clusters contained in the input files. It also prints a total count for all graphs if more than one graph is given.

OPTIONS

The following options are supported:

–n Count nodes.

–e Count edges.

–c Count connected components.

–C Count clusters. By definition, a cluster is a graph or subgraph whose name begins with "cluster".

–a Count all. Equivalent to **–encC**

–r Recursively analyze subgraphs.

–s Print no output. Only exit value is important.

–D Only analyze directed graphs.

–U Only analyze undirected graphs.

–v Verbose output.

–? Print usage information.

By default, *gc* returns the number of nodes and edges.

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.

EXIT STATUS

The following exit values are returned:

0 Successful completion.

1 The **–U** or **–E** option was used, and a graph of the wrong type was encountered.

AUTHOR

Emden R. Gansner <erg@research.att.com>

SEE ALSO

wc(1), acyclic(1), gvpr(1), gvcolor(1), ccomps(1), sccmap(1), tred(1), libgraph(3)