

**NAME**

test – check file types and compare values

**SYNOPSIS**

test *EXPRESSION*  
test

[ *EXPRESSION* ]  
[ ]  
[ *OPTION*

**DESCRIPTION**

Exit with the status determined by *EXPRESSION*.

**--help**  
display this help and exit

**--version**  
output version information and exit

An omitted *EXPRESSION* defaults to false. Otherwise, *EXPRESSION* is true or false and sets exit status. It is one of:

( *EXPRESSION* )  
*EXPRESSION* is true

! *EXPRESSION*  
*EXPRESSION* is false

*EXPRESSION1* **–a** *EXPRESSION2*  
both *EXPRESSION1* and *EXPRESSION2* are true

*EXPRESSION1* **–o** *EXPRESSION2*  
either *EXPRESSION1* or *EXPRESSION2* is true

**–n** *STRING*  
the length of *STRING* is nonzero

*STRING*  
equivalent to **–n** *STRING*

**–z** *STRING*  
the length of *STRING* is zero

*STRING1* = *STRING2*  
the strings are equal

*STRING1* != *STRING2*  
the strings are not equal

*INTEGER1* **–eq** *INTEGER2*  
*INTEGER1* is equal to *INTEGER2*

*INTEGER1* **–ge** *INTEGER2*  
*INTEGER1* is greater than or equal to *INTEGER2*

*INTEGER1* **–gt** *INTEGER2*  
*INTEGER1* is greater than *INTEGER2*

*INTEGER1* **–le** *INTEGER2*  
*INTEGER1* is less than or equal to *INTEGER2*

*INTEGER1* **–lt** *INTEGER2*  
*INTEGER1* is less than *INTEGER2*

**INTEGER1 -ne INTEGER2**  
INTEGER1 is not equal to INTEGER2

**FILE1 -ef FILE2**  
FILE1 and FILE2 have the same device and inode numbers

**FILE1 -nt FILE2**  
FILE1 is newer (modification date) than FILE2

**FILE1 -ot FILE2**  
FILE1 is older than FILE2

**-b FILE**  
FILE exists and is block special

**-c FILE**  
FILE exists and is character special

**-d FILE**  
FILE exists and is a directory

**-e FILE**  
FILE exists

**-f FILE**  
FILE exists and is a regular file

**-g FILE**  
FILE exists and is set-group-ID

**-G FILE**  
FILE exists and is owned by the effective group ID

**-h FILE**  
FILE exists and is a symbolic link (same as **-L**)

**-k FILE**  
FILE exists and has its sticky bit set

**-L FILE**  
FILE exists and is a symbolic link (same as **-h**)

**-O FILE**  
FILE exists and is owned by the effective user ID

**-p FILE**  
FILE exists and is a named pipe

**-r FILE**  
FILE exists and read permission is granted

**-s FILE**  
FILE exists and has a size greater than zero

**-S FILE**  
FILE exists and is a socket

**-t FD** file descriptor FD is opened on a terminal

**-u FILE**  
FILE exists and its set-user-ID bit is set

**-w FILE**  
FILE exists and write permission is granted

**-x FILE**  
FILE exists and execute (or search) permission is granted

Except for **-h** and **-L**, all **FILE**-related tests dereference symbolic links. Beware that parentheses need to be escaped (e.g., by backslashes) for shells. **INTEGER** may also be **-l STRING**, which evaluates to the length of **STRING**.

NOTE: your shell may have its own version of **test** and/or **]**, which usually supersedes the version described here. Please refer to your shell's documentation for details about the options it supports.

## AUTHOR

Written by Kevin Braunsdorf and Matthew Bradburn.

## REPORTING BUGS

Report bugs to <bug-coreutils@gnu.org>.

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## SEE ALSO

The full documentation for **test** is maintained as a Texinfo manual. If the **info** and **test** programs are properly installed at your site, the command

**info test**

should give you access to the complete manual.