

**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: Binary **-a** and **-o** are inherently ambiguous. Use `'test EXPR1 && test EXPR2'` or `'test EXPR1 || test EXPR2'` instead.

NOTE: `[` honors the **--help** and **--version** options, but `test` does not. `test` treats each of those as it treats any other nonempty 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

GNU coreutils online help: [<https://www.gnu.org/software/coreutils/>](https://www.gnu.org/software/coreutils/)

Report `[` translation bugs to [<https://translationproject.org/team/>](https://translationproject.org/team/)

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## SEE ALSO

Full documentation at: [<https://www.gnu.org/software/coreutils/\[>](https://www.gnu.org/software/coreutils/[><https://www.gnu.org/software/coreutils/[>)  
or available locally via: `info '(coreutils) test invocation'`