

NAME

`fnmatch` – match filename or pathname

SYNOPSIS

```
#include <fnmatch.h>
```

```
int fnmatch(const char *pattern, const char *string, int flags);
```

DESCRIPTION

The `fnmatch()` function checks whether the *string* argument matches the *pattern* argument, which is a shell wildcard pattern (see `glob(7)`).

The *flags* argument modifies the behavior; it is the bitwise OR of zero or more of the following flags:

FNM_NOESCAPE

If this flag is set, treat backslash as an ordinary character, instead of an escape character.

FNM_PATHNAME

If this flag is set, match a slash in *string* only with a slash in *pattern* and not by an asterisk (*) or a question mark (?) metacharacter, nor by a bracket expression ([]) containing a slash.

FNM_PERIOD

If this flag is set, a leading period in *string* has to be matched exactly by a period in *pattern*. A period is considered to be leading if it is the first character in *string*, or if both **FNM_PATHNAME** is set and the period immediately follows a slash.

FNM_FILE_NAME

This is a GNU synonym for **FNM_PATHNAME**.

FNM_LEADING_DIR

If this flag (a GNU extension) is set, the pattern is considered to be matched if it matches an initial segment of *string* which is followed by a slash. This flag is mainly for the internal use of `glibc` and is implemented only in certain cases.

FNM_CASEFOLD

If this flag (a GNU extension) is set, the pattern is matched case-insensitively.

FNM_EXTMATCH

If this flag (a GNU extension) is set, extended patterns are supported, as introduced by 'ksh' and now supported by other shells. The extended format is as follows, with *pattern-list* being a '|' separated list of patterns.

```
'?(pattern-list)'
```

The pattern matches if zero or one occurrences of any of the patterns in the *pattern-list* match the input *string*.

```
'*(pattern-list)'
```

The pattern matches if zero or more occurrences of any of the patterns in the *pattern-list* match the input *string*.

```
'+(pattern-list)'
```

The pattern matches if one or more occurrences of any of the patterns in the *pattern-list* match the input *string*.

```
'@(pattern-list)'
```

The pattern matches if exactly one occurrence of any of the patterns in the *pattern-list* match the input *string*.

```
'!(pattern-list)'
```

The pattern matches if the input *string* cannot be matched with any of the patterns in the *pattern-list*.

RETURN VALUE

Zero if *string* matches *pattern*, **FNM_NOMATCH** if there is no match or another nonzero value if there is an error.

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes(7)**.

Interface	Attribute	Value
fnmatch()	Thread safety	MT-Safe env locale

CONFORMING TO

POSIX.1-2001, POSIX.1-2008, POSIX.2. The **FNM_FILE_NAME**, **FNM_LEADING_DIR**, and **FNM_CASEFOLD** flags are GNU extensions.

SEE ALSO

sh(1), **glob(3)**, **scandir(3)**, **wordexp(3)**, **glob(7)**

COLOPHON

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