

NAME

`perror` – print a system error message

SYNOPSIS

```
#include <stdio.h>
```

```
void perror(const char *s);
```

```
#include <errno.h>
```

```
const char * const sys_errlist[];
```

```
int sys_nerr;
```

```
int errno; /* Not really declared this way; see errno(3) */
```

Feature Test Macro Requirements for glibc (see [feature_test_macros\(7\)](#)):

sys_errlist, *sys_nerr*:

Since glibc 2.19:

`_DEFAULT_SOURCE`

Glibc 2.19 and earlier:

`_BSD_SOURCE`

DESCRIPTION

The `perror()` function produces a message on standard error describing the last error encountered during a call to a system or library function.

First (if *s* is not NULL and **s* is not a null byte (`\0`)), the argument string *s* is printed, followed by a colon and a blank. Then an error message corresponding to the current value of *errno* and a new-line.

To be of most use, the argument string should include the name of the function that incurred the error.

The global error list *sys_errlist*[], which can be indexed by *errno*, can be used to obtain the error message without the newline. The largest message number provided in the table is *sys_nerr*–1. Be careful when directly accessing this list, because new error values may not have been added to *sys_errlist*[],. The use of *sys_errlist*[] is nowadays deprecated; use `strerror(3)` instead.

When a system call fails, it usually returns –1 and sets the variable *errno* to a value describing what went wrong. (These values can be found in `<errno.h>`.) Many library functions do likewise. The function `perror()` serves to translate this error code into human-readable form. Note that *errno* is undefined after a successful system call or library function call: this call may well change this variable, even though it succeeds, for example because it internally used some other library function that failed. Thus, if a failing call is not immediately followed by a call to `perror()`, the value of *errno* should be saved.

ATTRIBUTES

For an explanation of the terms used in this section, see [attributes\(7\)](#).

Interface	Attribute	Value
<code>perror()</code>	Thread safety	MT-Safe race:stderr

CONFORMING TO

`perror()`, *errno*: POSIX.1-2001, POSIX.1-2008, C89, C99, 4.3BSD.

The externals *sys_nerr* and *sys_errlist* derive from BSD, but are not specified in POSIX.1.

NOTES

The externals *sys_nerr* and *sys_errlist* are defined by glibc, but in `<stdio.h>`.

SEE ALSO

`err(3)`, `errno(3)`, `error(3)`, `strerror(3)`

COLOPHON

This page is part of release 5.05 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at

<https://www.kernel.org/doc/man-pages/>.