

**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
<b>perror()</b>	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 4.10 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/>.