

NAME

difftime – calculate time difference

SYNOPSIS

```
#include <time.h>
```

```
double difftime(time_t time1, time_t time0);
```

DESCRIPTION

The **difftime()** function returns the number of seconds elapsed between time *time1* and time *time0*, represented as a *double*. Each of the times is specified in calendar time, which means its value is a measurement (in seconds) relative to the Epoch, 1970-01-01 00:00:00 +0000 (UTC).

ATTRIBUTES

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

Interface	Attribute	Value
difftime()	Thread safety	MT-Safe

CONFORMING TO

POSIX.1-2001, POSIX.1-2008, C89, C99, SVr4, 4.3BSD.

NOTES

On a POSIX system, *time_t* is an arithmetic type, and one could just define

```
#define difftime(t1,t0) (double)(t1 - t0)
```

when the possible overflow in the subtraction is not a concern.

SEE ALSO

[date\(1\)](#), [gettimeofday\(2\)](#), [time\(2\)](#), [ctime\(3\)](#), [gmtime\(3\)](#), [localtime\(3\)](#)

COLOPHON

This page is part of release 4.16 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/>.