

NAME

basename, **dirname** — separate path components

SYNOPSIS

```
basename [-z] path [suffix]
basename [-z] -a path...
basename [-z] -s suffix path...
dirname [-z] path...
```

DESCRIPTION

Write the final or pre-final segments of *paths*, stripping *suffix*, if matched, to the standard output stream, separated by newlines.

Trailing slashes are removed; **basename** then removes everything up to the final slash, and **dirname** removes everything following it, then strips trailing ones. If a *path* doesn't contain slashes, **basename** outputs it verbatim, and **dirname** outputs ".".

These are strictly string operations, and do *not* depend on the filesystem state.

OPTIONS

-a, --multiple Accept multiple *paths*.
-s, --suffix=*suffix* Accept multiple *paths* and set *suffix*.
-z, --zero Separate output lines with null bytes instead of newlines.

EXAMPLES

```
$ basename /bin/sort
sort
$ basename include/stdio.h .h
stdio
$ basename -s .h include/stdio.h /usr/include/stdlib.h
stdio
stdlib
$ basename -a dir/file1 dir/dir2/file2 file3
file1
file2
file3

$ dirname /usr/local/bin/
/usr/local
$ dirname dir1/str dir2/str
dir1
dir2
$ dirname stdio.h
.
```

STANDARDS

Conforms to IEEE Std 1003.1-2024 ("POSIX.1"), with no special processing for //. **-zas** and multiple *paths* are extensions, originating from the GNU system, also present in FreeBSD.

HISTORY

basename appeared, fully formed, save for lacking a newline at the end, in Version 7 AT&T UNIX, as `basename(1)` – "strip filename affixes":

```
basename string [ suffix ]
```

CB-UNIX at or before 2.1 contains unrelated shell implementations (newline included) of both. CB-UNIX was, among others, the basis for AT&T System III UNIX, where it first saw light outside AT&T.

These implementations continued to evolve, growing peculiar preservational handling of the `//` prefix, until AT&T System V Release 3 UNIX, which IEEE Std 1003.2-1992 (“POSIX.2”) standardised, requiring that handling on systems where `//`-prefixed paths are different from `/`-prefixed ones. 4.3BSD–Reno includes both, without `//`.