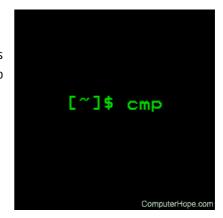# Linux cmp command

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On Unix-like operating systems, the **cmp** command is used to compare two files byte by byte. If a difference is found, it reports the byte and line number where the first difference is found. If no differences are found, by default, **cmp** returns no output.

This page covers the GNU/Linux version of **cmp**.

Syntax

```
cmp [OPTION]... FILE1 [FILE2 [SKIP1 [SKIP2]]]
```

Options

The optional **SKIP1** and **SKIP2** specify the number of bytes to skip at the beginning of each file (zero by default).

SKIP values may be followed by the following multiplicative suffixes:

kB	kilobytes	1000
K	kibibytes	1024
MB	megabytes	1,000,000
M	mebibytes	1,048,576
GB	gigabytes	1,000,000,000
G	gibibytes	1,073,741,824

...and so on for T, P, E, Z, Y.

If a **FILE** is specified as '**-**' or not specified, data is read from standard input. **cmp's** exit status is **0** if inputs are the same, **1** if different, or **2** if the program encounters a problem.

Additional options:

-b, --print-bytes	Print differing bytes.
-i, --ignore-initial=SKIP	Skip first SKIP bytes of both files.
-i, --ignore-initial=SKIP1:SKIP2	Skip first SKIP1 bytes of FILE1 and the first SKIP2 bytes of FILE2.

-l, --verbose	Output byte numbers and differing byte values.
-n, --bytes=*LIMIT*	Compare at most *LIMIT* bytes.
-s, --quiet, --silent	Suppress all normal output.
--help	Display a help message and exit.
-v, --version	Output version information and exit.

Examples

```
cmp file1.txt file2.txt
```

Compares **file1** to **file2**, reading each file byte-by-byte and comparing them until one of the byte pairs is not equal. When a difference is found, it outputs the location in the file where the difference was found, and exit. Example output:

```
file.txt file2.txt differ: char 1011, line 112
```

Related commands

comm — Compare two sorted files line by line.
diff — Identify the differences between two files.