

Linux join command

Updated: 05/04/2019 by Computer Hope

On Unix-like operating systems, the **join** command joins the lines of two files which share a common field of data.

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

Syntax

```
join [OPTION]... FILE1 FILE2
```



For each pair of input lines with identical join fields, write a line to standard output. The default join field is the first, delimited by whitespace. When *FILE1* or *FILE2* (not both) is -, read standard input.

Options

-a <i>FILENUM</i>	Also, print unpairable lines from file <i>FILENUM</i> , where <i>FILENUM</i> is 1 or 2, corresponding to <i>FILE1</i> or <i>FILE2</i> .
-e <i>EMPTY</i>	Replace missing input fields with <i>EMPTY</i> .
-i , --ignore-case	Ignore differences in case when comparing fields.
-j <i>FIELD</i>	Equivalent to "-1 <i>FIELD</i> -2 <i>FIELD</i> ".
-o <i>FORMAT</i>	Obey <i>FORMAT</i> while constructing output line.
-t <i>CHAR</i>	Use <i>CHAR</i> as input and output field separator.
-v <i>FILENUM</i>	Like -a <i>FILENUM</i> , but suppress joined output lines.
-1 <i>FIELD</i>	Join on this <i>FIELD</i> of file 1.
-2 <i>FIELD</i>	Join on this <i>FIELD</i> of file 2.
--check-order	Check that the input is correctly sorted, even if all input lines are pairable.
--nocheck-order	Do not check that the input is correctly sorted.
--header	Treat the first line in each file as field headers, print them without trying to pair them.
--help	Display a help message and exit.
--version	Display version information and exit.

Unless **-t CHAR** is given, fields are separated by leading blank spaces; otherwise, fields are separated by *CHAR*. Any *FIELD* is a field number counted from 1.

If *FORMAT* is the keyword **auto**, then the first line of each file determines the number of fields output for each line.

FILE1 and *FILE2* must be sorted on the join fields. The sort command can accomplish this. If the input is not sorted and some lines cannot be joined, a warning message will be given.

Examples

If we have a file, **myfile1.txt**, whose contents are:

```
1 India
2 US
3 Ireland
4 UK
5 Canada
```

...and another file, **myfile2.txt**, whose contents are:

```
1 NewDelhi
2 Washington
3 Dublin
4 London
5 Toronto
```

The common fields are the fields which begin with the same number. We can join the contents using the following command:

```
join myfile1.txt myfile2.txt
```

...which outputs the following to standard output:

```
1 India NewDelhi
2 US Washington
3 Ireland Dublin
4 UK London
5 Canada Toronto
```

If we wanted to create a new file with the joined contents, we could use the following command:

```
join myfile1.txt myfile2.txt > myjoinedfile.txt
```

...which directs the output into a new file called **myjoinedfile.txt**, containing the same output as the example above.

Related commands

comm – Compare two sorted files line by line.

sort – Sort the lines in a text file.

uniq – Identify, and optionally filter out, repeated lines in a file.

© 2024 Computer Hope