

Text Processing in Linux - The Sort Command #4

Problem Statement

The 'Sort' Command Line Program

This is frequently used for sorting input in text or TSV formats, in various different ways supported by it; which may be either lexicographical, case insensitive, based on the numeric field only, based on a particular column, etc.

Here are some quick notes about 'sort'. The working examples provided in the added reference links might also help.

The vanilla 'sort' command simply sorts the lines of the input file in lexicographical order.

The **-n** option sorts the file on the basis of the numeric field available, if the first word or column in the file is a number.

The **-r** option reverses the sorting order to either the reverse of the usual lexicographical ordering, or descending order (while sorting in numerical mode).

The **-k** option is useful while sorting a table of data (tsv, csv etc.) based on a specified column (or columns).

The **-t** option is used while specifying a delimiter in a particular file (where columns are separated by tabs, spaces, pipes etc.).

A few useful resources to study different variants of the **sort** command are:

[A Wikipedia entry for the 'sort' command](#)

[How to Sort Files in Linux using Sort Command](#)

Task

You are given a file of text, where each line contains a number (which may be either an integer or have decimal places). There will be no extra characters other than the number or the newline at the end of each line. Sort the lines in **descending** order - - such that the first line holds the (numerically) largest number and the last line holds the (numerically) smallest number.

Input Format

A text file where each line contains a number as described above.

Output Format

The text file, with lines re-ordered in **descending** order (numerically).

Sample Input

```
9.1
43.7
2.2
62.1
2.1
9.3
43.5
4.6
44.6
4.7
42.7
47.4
46.6
```

4.5
55.6
4
9.2
66.6
2
2.3

Sample Output

66.6
62.1
55.6
47.4
46.6
44.6
43.7
43.5
42.7
9.3
9.2
9.1
4.7
4.6
4.5
4
2.3
2.2
2.1
2