The wc command in UNIX is **a command line utility for printing newline, word and byte counts for files**. It can return the number of lines in a file, the number of characters in a file and the number of words in a file. It can also be combine with pipes for general counting operations.

wc stands for **word count**. As the name implies, it is mainly used for counting purpose.

* It is used to find out **number of lines**, **word count**, **byte and characters count** in the files specified in the file arguments.
* By default it displays **four-columnar output.**
* First column shows number of lines present in a file specified, second column shows number of words present in the file, third column shows number of characters present in file and fourth column itself is the file name which are given as argument.

**Syntax:**

**wc [OPTION]... [FILE]...**

Let us consider two files having name **state.txt** and **capital.txt** containing 5 names of the Indian states and capitals respectively.

**$ cat state.txt**

Andhra Pradesh

Arunachal Pradesh

Assam

Bihar

Chhattisgarh

**$ cat capital.txt**

Hyderabad

Itanagar

Dispur

Patna

Raipur

**Passing only one file name in the argument.**

**$ wc state.txt**

5 7 58 state.txt

OR

**$ wc capital.txt**

5 5 39 capital.txt

**Passing more than one file name in the argument.**

$ wc state.txt capital.txt

5 7 58 state.txt

5 5 39 capital.txt

10 12 97 total

**Note :** When more than file name is specified in argument then command will display four-columnar output for all individual files plus one extra row displaying total number of lines, words and characters of all the files specified in argument, followed by keyword **total**. **Options:** **1. -l:** This option prints the **number of lines** present in a file. With this option wc command displays two-columnar output, 1st column shows number of lines present in a file and 2nd itself represent the file name.

**With one file name**

**$ wc -l state.txt**

5 state.txt

**With more than one file name**

**$ wc -l state.txt capital.txt**

5 state.txt

5 capital.txt

10 total

**2. -w:** This option prints the **number of words** present in a file. With this option wc command displays two-columnar output, 1st column shows number of words present in a file and 2nd is the file name.

**With one file name**

**$ wc -w state.txt**

7 state.txt

**With more than one file name**

**$ wc -w state.txt capital.txt**

7 state.txt

5 capital.txt

12 total

**3. -c:** This option displays **count of bytes** present in a file. With this option it display two-columnar output, 1st column shows number of bytes present in a file and 2nd is the file name.

**With one file name**

**$ wc -c state.txt**

58 state.txt

**With more than one file name**

**$ wc -c state.txt capital.txt**

58 state.txt

39 capital.txt

97 total

**4. -m:** Using **-m** option ‘wc’ command displays **count of characters** from a file.

**With one file name**

**$ wc -m state.txt**

56 state.txt

**With more than one file name**

**$ wc -m state.txt capital.txt**

58 state.txt

39 capital.txt

97 total

**5. -L:** The ‘wc’ command allow an argument **-L**, it can be used to print out the length of longest (number of characters) line in a file. So, we have the longest character line *Arunachal Pradesh* in a file **state.txt** and *Hyderabad* in the file **capital.txt**. But with this option if more than one file name is specified then the last row i.e. the extra row, doesn’t display total but it display the maximum of all values displaying in the first column of individual files. **Note:** A **character** is the smallest unit of information that includes space, tab and newline.

**With one file name**

**$ wc -L state.txt**

17 state.txt

**With more than one file name**

**$ wc -L state.txt capital.txt**

17 state.txt

10 capital.txt

17 total

**6. –version:** This option is used to display the version of **wc** which is currently running on your system.

$ wc --version

wc (GNU coreutils) 8.26

Packaged by Cygwin (8.26-1)

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**Applications of wc Command**

**1. To count all files and folders present in directory:** As we all know [**ls**](https://www.geeksforgeeks.org/practical-applications-ls-command-linux/) command in unix is used to display all the files and folders present in the directory, when it is piped with **wc** command with **-l** option it display count of all files and folders present in current directory.

**$ ls gfg**

a.txt

b.txt

c.txt

d.txt

e.txt

geeksforgeeks

India

**$ ls gfg | wc -l**

7

**2. Display number of word count only of a file:** We all know that this can be done with *wc* command having *-w* option, **wc -w file\_name**, but this command shows two-columnar output one is count of words and other is file name.

**$ wc -w state.txt**

7 state.txt

So to display 1st column only, **pipe(|)** output of **wc -w** command to **cut** command with **-c** option. Or use input redirection(<).

**$ wc -w state.txt | cut -c1**

7

OR

**$ wc -w < state.txt**

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