Tail is a command which **prints the last few number of lines (10 lines by default) of a certain file, then terminates**. Example 1: By default “tail” prints the last 10 lines of a file, then exits. as you can see, this prints the last 10 lines of /var/log/messages.

**Syntax:**

tail [OPTION]... [FILE]...

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

**$ cat state.txt**

Andhra Pradesh

Arunachal Pradesh

Assam

Bihar

Chhattisgarh

Goa

Gujarat

Haryana

Himachal Pradesh

Jammu and Kashmir

Jharkhand

Karnataka

Kerala

Madhya Pradesh

Maharashtra

Manipur

Meghalaya

Mizoram

Nagaland

Odisha

Punjab

Rajasthan

Sikkim

Tamil Nadu

Telangana

Tripura

Uttar Pradesh

Uttarakhand

West Bengal

Without any option it display only the last 10 lines of the file specified.  
Example:

**$ tail state.txt**

Odisha

Punjab

Rajasthan

Sikkim

Tamil Nadu

Telangana

Tripura

Uttar Pradesh

Uttarakhand

West Bengal

**$ tail -n 3 state.txt**

Uttar Pradesh

Uttarakhand

West Bengal

OR

**$ tail -3 state.txt**

Uttar Pradesh

Uttarakhand

West Bengal

**tail +n file\_name**, data will start printing from line number ‘n’ till the end of the file specified.

$ tail +25 state.txt

Telangana

Tripura

Uttar Pradesh

Uttarakhand

West Bengal

**With negative num**

**$ tail -c -6 state.txt**

Bengal

OR

**$ tail -c 6 state.txt**

Bengal

**With positive num**

$ tail -c +263 state.txt

Nadu

Telangana

Tripura

Uttar Pradesh

Uttarakhand

3. **-q:** It is used if more than 1 file is given. Because of this command, data from each file is not precedes by its file name.

**Without using -q option**

**$ tail state.txt capital.txt**

state.txt

Odisha

Punjab

Rajasthan

Sikkim

Tamil Nadu

Telangana

Tripura

Uttar Pradesh

Uttarakhand

West Bengal

capital.txt

Dispur

Patna

Raipur

Panaji

Gandhinagar

Chandigarh

Shimla

Srinagar

Ranchi

**With using -q option**

**$ tail -q state.txt capital.txt**

Odisha

Punjab

Rajasthan

Sikkim

Tamil Nadu

Telangana

Tripura

Uttar Pradesh

Uttarakhand

West BengalDispur

Patna

Raipur

Panaji

Gandhinagar

Chandigarh

Shimla

Srinagar

Ranchi

Bengaluru

4. **-f:** This option is mainly used by system administration to monitor the growth of the log files written by many Unix program as they are running. This option shows the last ten lines of a file and will update when new lines are added. As new lines are written to the log, the console will update with the new lines. The prompt doesn’t return even after work is over so, we have to use the interrupt key to abort this command. In general, the applications writes error messages to log files. You can use the **-f** option to check for the error messages as and when they appear in the log file.

**$ tail -f logfile**

5. **-v:** By using this option, data from the specified file is always preceded by its file name.

$ tail -v state.txt

==> state.txt <==

Odisha

Punjab

Rajasthan

Sikkim

Tamil Nadu

Telangana

Tripura

Uttar Pradesh

Uttarakhand

West Bengal

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

$ tail --version

tail (GNU coreutils) 8.26

Packaged by Cygwin (8.26-1)

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**Applications of tail Command**

1. **How to use tail with pipes(|):** The tail command can be piped with many other commands of the unix. In the following example output of the tail command is given as input to the sort command with -r option to sort the last 7 state names coming from file state.txt in the reverse order.

**$ tail -n 7 state.txt**

Sikkim

Tamil Nadu

Telangana

Tripura

Uttar Pradesh

Uttarakhand

West Bengal

**$ tail -n 7 state.txt | sort -r**

West Bengal

Uttarakhand

Uttar Pradesh

Tripura

Telangana

Tamil Nadu

Sikkim

It can also be piped with one or more filters for additional processing. Like in the following example, we are using cat, head and tail command and whose output is stored in the file name list.txt using directive(>).

**$ cat state.txt | head -n 20 | tail -n 5 > list.txt**

**$ cat list.txt**

Manipur

Meghalaya

Mizoram

Nagaland

Odisha

What is happening in this command let’s try to explore it. First **cat** command gives all the data present in the file state.txt and after that pipe transfers all the output coming from **cat** command to the **head** command. Head command gives all the data from start(line number 1) to the line number 20 and pipe transfer all the output coming from **head** command to **tail** command. Now, tail command gives last 5 lines of the data and the output goes to the file name list.txt via directive operator.