



JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR  
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**Faculty of Education and methodology**

**Department of Computer Science and Engineering**

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**Program-** B.Tech 6<sup>th</sup>Semester

**Course Name** – Web Intelligence, HADOOP and Big Data Analysis

**Session no.:** 9

**Session Name-** Hadoop - Command Reference

Academic Day starts with –

- Greeting with saying '**Namaste**' by joining Hands together following by 2-3 Minutes Happy session, Celebrating birthday of any student of respective class and **National Anthem**.

Lecture starts with- quotations' answer writing

- Review of previous Session- **Verifying Hadoop installation**

Topic to be discussed today- Today We will discuss about – **Command references for Hadoop**

- Lesson deliverance (ICT, Diagrams & Live Example)-  
➤ Diagrams

Introduction & Brief Discussion about the Topic – **An overview about installation of Hadoop**

## Hadoop - Command Reference

There are many more commands in "**\$HADOOP\_HOME/bin/hadoop fs**" than are demonstrated here, although these basic operations will get you started. Running **./bin/hadoop dfs** with no additional arguments will list all the commands that can be run with the FsShell system. Furthermore, **\$HADOOP\_HOME/bin/hadoop fs -help** commandName will display a short usage summary for the operation in question, if you are stuck.

A table of all the operations is shown below. The following conventions are used for parameters

"<path>" means any file or directory name.  
"<path>..." means one or more file or directory names.  
"<file>" means any filename.  
"<src>" and "<dest>" are path names in a directed operation.  
"<localSrc>" and "<localDest>" are paths as above, but on the local file system.

All other files and path names refer to the objects inside HDFS.

Sr.No	Command & Description
1	<b>-ls &lt;path&gt;</b> Lists the contents of the directory specified by path, showing the names, permissions, owner, size and modification date for each entry.
2	<b>-lsr &lt;path&gt;</b> Behaves like -ls, but recursively displays entries in all subdirectories of path.
3	<b>-du &lt;path&gt;</b> Shows disk usage, in bytes, for all the files which match path; filenames are reported with the full HDFS protocol prefix.
4	<b>-dus &lt;path&gt;</b> Like -du, but prints a summary of disk usage of all files/directories in the path.
5	<b>-mv &lt;src&gt;&lt;dest&gt;</b> Moves the file or directory indicated by src to dest, within HDFS.
6	<b>-cp &lt;src&gt; &lt;dest&gt;</b> Copies the file or directory identified by src to dest, within HDFS.

7	<b>-rm &lt;path&gt;</b> Removes the file or empty directory identified by path.
8	<b>-rmr &lt;path&gt;</b> Removes the file or directory identified by path. Recursively deletes any child entries (i.e., files or subdirectories of path).
9	<b>-put &lt;localSrc&gt; &lt;dest&gt;</b> Copies the file or directory from the local file system identified by localSrc to dest within the DFS.
10	<b>-copyFromLocal &lt;localSrc&gt; &lt;dest&gt;</b> Identical to -put
11	<b>-moveFromLocal &lt;localSrc&gt; &lt;dest&gt;</b> Copies the file or directory from the local file system identified by localSrc to dest within HDFS, and then deletes the local copy on success.
12	<b>-get [-crc] &lt;src&gt; &lt;localDest&gt;</b> Copies the file or directory in HDFS identified by src to the local file system path identified by localDest.
13	<b>-getmerge &lt;src&gt; &lt;localDest&gt;</b> Retrieves all files that match the path src in HDFS, and copies them to a single, merged file in the local file system identified by localDest.
14	<b>-cat &lt;file-name&gt;</b> Displays the contents of filename on stdout.
15	<b>-copyToLocal &lt;src&gt; &lt;localDest&gt;</b> Identical to -get
16	<b>-moveToLocal &lt;src&gt; &lt;localDest&gt;</b> Works like -get, but deletes the HDFS copy on success.
17	<b>-mkdir &lt;path&gt;</b> Creates a directory named path in HDFS.  Creates any parent directories in path that are missing (e.g., mkdir -p in Linux).
18	<b>-setrep [-R] [-w] rep &lt;path&gt;</b>

	Sets the target replication factor for files identified by path to rep. (The actual replication factor will move toward the target over time)
19	<b>-touchz &lt;path&gt;</b> Creates a file at path containing the current time as a timestamp. Fails if a file already exists at path, unless the file is already size 0.
20	<b>-test [-ezd] &lt;path&gt;</b> Returns 1 if path exists; has zero length; or is a directory or 0 otherwise.
21	<b>-stat [format] &lt;path&gt;</b> Prints information about path. Format is a string which accepts file size in blocks (%b), filename (%n), block size (%o), replication (%r), and modification date (%y, %Y).
22	<b>-tail [-f] &lt;file2name&gt;</b> Shows the last 1KB of file on stdout.
23	<b>-chmod [-R] mode,mode,... &lt;path&gt;...</b> Changes the file permissions associated with one or more objects identified by path.... Performs changes recursively with R. mode is a 3-digit octal mode, or {augo}+/-{rwxX}. Assumes if no scope is specified and does not apply an umask.
24	<b>-chown [-R] [owner][:group]] &lt;path&gt;...</b> Sets the owning user and/or group for files or directories identified by path.... Sets owner recursively if -R is specified.
25	<b>-chgrp [-R] group &lt;path&gt;...</b> Sets the owning group for files or directories identified by path.... Sets group recursively if -R is specified.
26	<b>-help &lt;cmd-name&gt;</b> Returns usage information for one of the commands listed above. You must omit the leading '-' character in cmd.

## References-

1. **Book:** Hadoop: The Definitive Guide by Tom White, 3rd Edition, O'reilly Hadoop in Action by Chuck Lam, MANNING Publications
2. **Online:** <https://www.tutorialspoint.com/>
3. **Online:** <http://www.oracle.com>

## QUESTIONS: -

**Q1. Explain various commands that are used in Hadoop.**

Next, we will discuss about mapreduce.

- Academic Day ends with-  
National song 'Vande Mataram'