

To start Hadoop

```
hdfs namenode -format
```

```
start-dfs.sh
```

```
start-yarn.sh
```

```
jps
```

<http://localhost:50070/>

```
stop-all.sh
```

Basic file commands

Hadoop file commands take the form of:

```
hadoop fs -cmd <args>
```

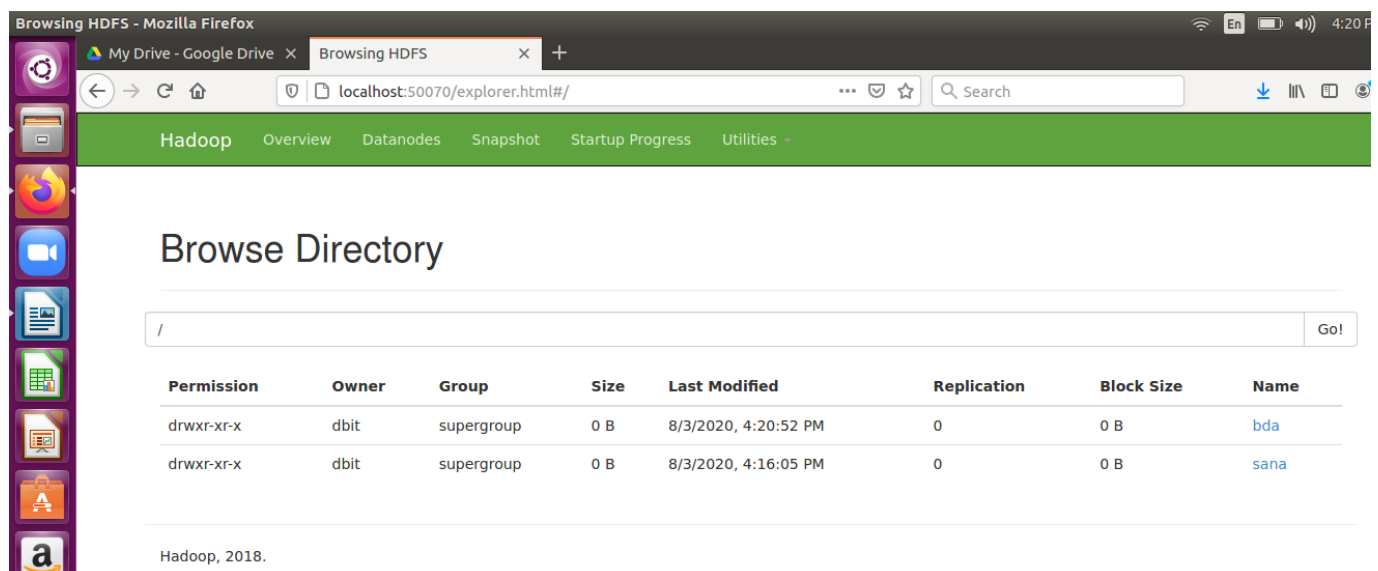
where cmd is the specific file command and <args> is a variable number of arguments.

1. mkdir

```
hadoop fs -mkdir /sana
```

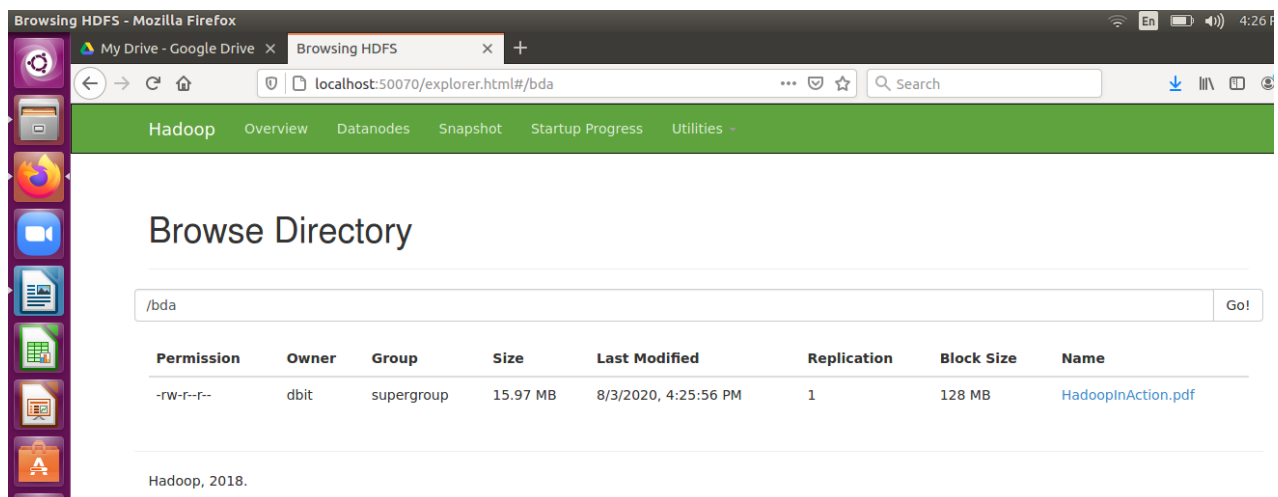
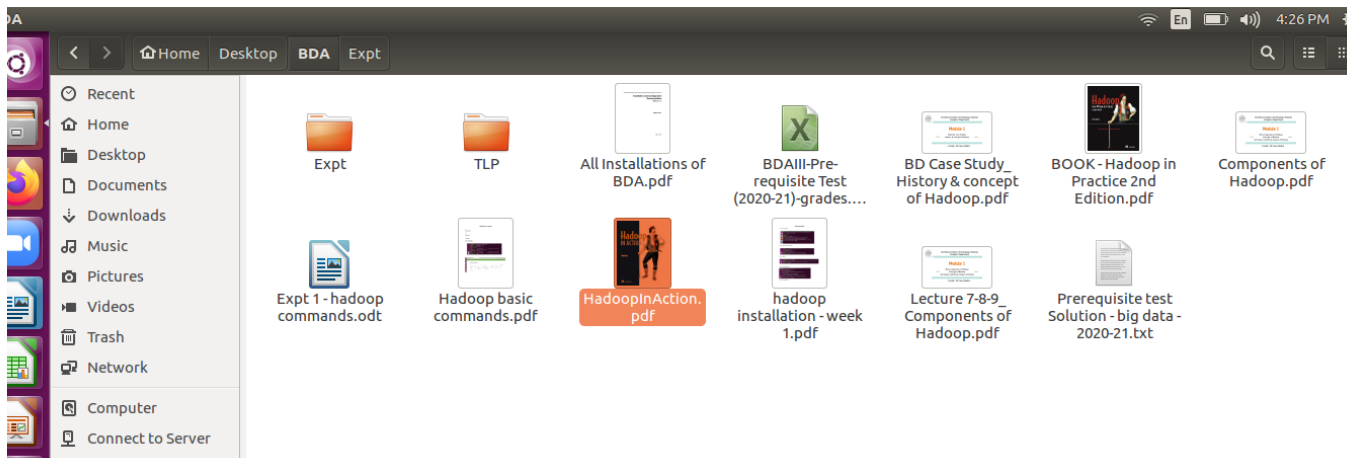
```
hadoop fs -mkdir /sana .....(repeat the command...message will come...mkdir: `/sana': File exists)
```

```
hadoop fs -mkdir /bda
```



2. put: This command is used to copy files from the local file system to the HDFS filesystem. This command is similar to **-copyFromLocal** command

```
hadoop fs -put Desktop/BDA/HadoopInAction.pdf /bda/
```



If file name has space then in command use %20 instead of space:

Example:

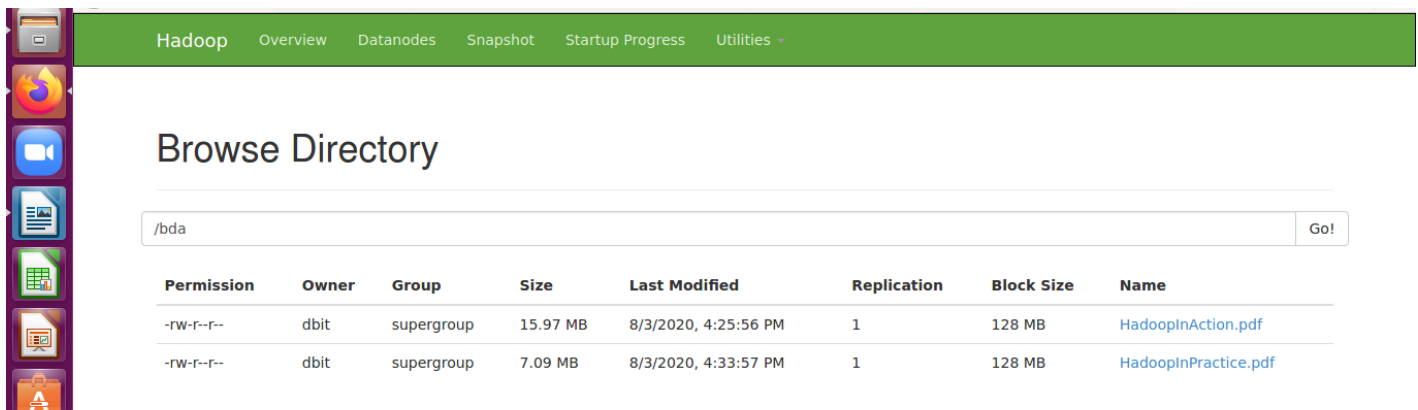
```
hadoop fs -put /home/dbit/Desktop/BDA/Hadoop%20basic%20commands.pdf /bda/
```

```
hadoop fs -put /home/dbit/Desktop/BDA/hadoop%20installation%20-%20week%201.pdf /bda/
```

```
hadoop fs -put /home/dbit/Desktop/BDA/map_reduce_tutorial.pdf /bda/
```

3. (or moveFromLocal)

```
hadoop fs -moveFromLocal Desktop/BDA/HadoopInPractice.pdf /bda
```



Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name
-rw-r--r--	dbit	supergroup	15.97 MB	8/3/2020, 4:25:56 PM	1	128 MB	HadoopInAction.pdf
-rw-r--r--	dbit	supergroup	7.09 MB	8/3/2020, 4:33:57 PM	1	128 MB	HadoopInPractice.pdf

4. ls: it is used for listing the directories present under a specific directory in an HDFS system

options:

-d	The option is used to list the directories as plain files
-h	The option is used to format the sizes of files into a human-readable manner than just number of bytes
-R	The option is used to recursively list the contents of directories

hadoop fs -ls /

hadoop fs -ls /bda

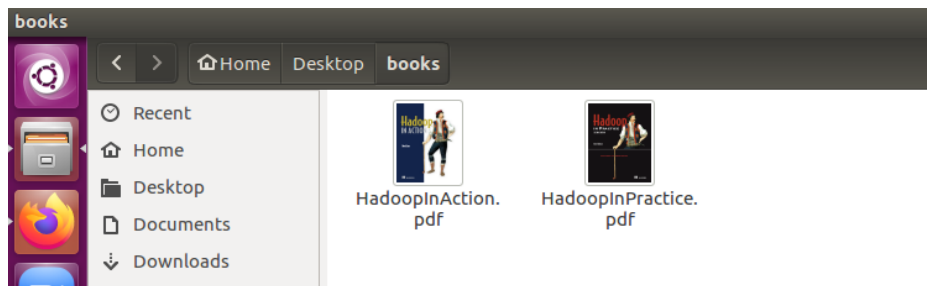
hadoop fs -ls -h /bda

```
dbit@dbitcomp: ~
dbit@dbitcomp:~$ hadoop fs -ls /
Found 2 items
drwxr-xr-x - dbit supergroup      0 2020-08-03 16:33 /bda
drwxr-xr-x - dbit supergroup      0 2020-08-03 16:16 /sana
dbit@dbitcomp:~$ hadoop fs -ls /bda
Found 2 items
-rw-r--r-- 1 dbit supergroup 16744378 2020-08-03 16:25 /bda/HadoopInAction.pdf
-rw-r--r-- 1 dbit supergroup 7433435 2020-08-03 16:33 /bda/HadoopInPractice.pdf
dbit@dbitcomp:~$ hadoop fs -ls -h /bda
Found 2 items
-rw-r--r-- 1 dbit supergroup 16.0 M 2020-08-03 16:25 /bda/HadoopInAction.pdf
-rw-r--r-- 1 dbit supergroup 7.1 M 2020-08-03 16:33 /bda/HadoopInPractice.pdf
dbit@dbitcomp:~$
```

5. get:

This command is used to copy files from the HDFS file system to the local file system, just the opposite to put command.

hadoop fs -get /bda Desktop/books

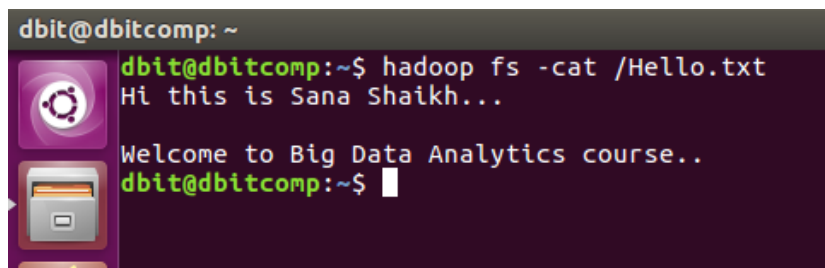
**6. cat:**

This command is used for displaying the contents of a file on the console.

```
hadoop fs -cat /hello.txt
```

```
hadoop fs -cat /bda/HadoopInAction.pdf
```

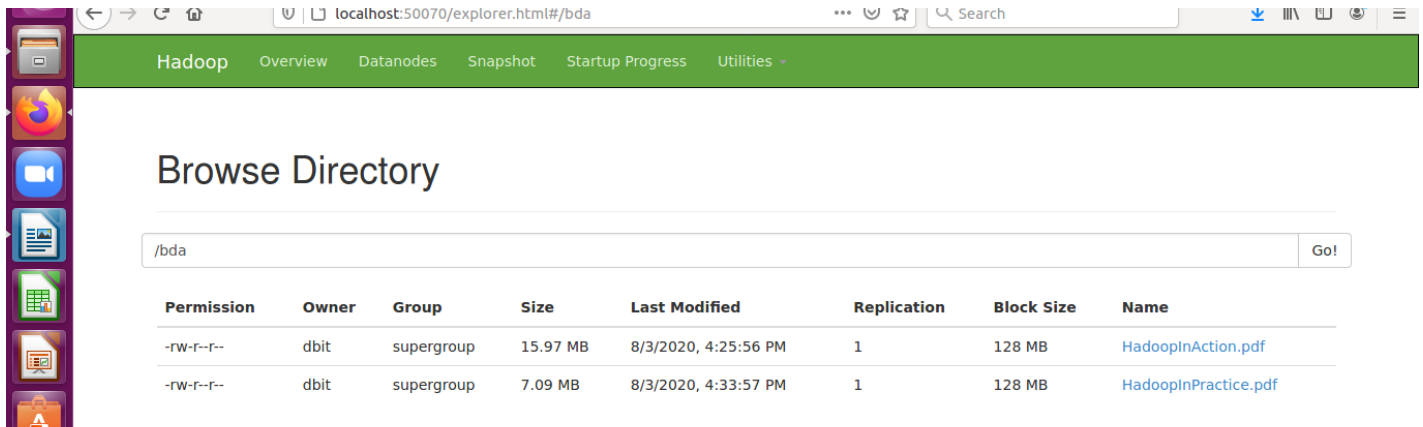
Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name
-rw-r--r--	dbit	supergroup	66 B	8/3/2020, 5:03:41 PM	1	128 MB	Hello.txt
drwxr-xr-x	dbit	supergroup	0 B	8/3/2020, 4:33:57 PM	0	0 B	bda
drwxr-xr-x	dbit	supergroup	0 B	8/3/2020, 4:16:05 PM	0	0 B	sana



7. cp: This command is used for copying files from one directory to another directory within the HDFS file system. Sample: `hadoop fs -cp /sana /sana1`

Before command:

Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name
-rw-r--r--	dbit	supergroup	15.97 MB	8/3/2020, 4:25:56 PM	1	128 MB	HadoopInAction.pdf
-rw-r--r--	dbit	supergroup	7.09 MB	8/3/2020, 4:33:57 PM	1	128 MB	HadoopInPractice.pdf



localhost:50070/explorer.html#/bda

Hadoop Overview Datanodes Snapshot Startup Progress Utilities

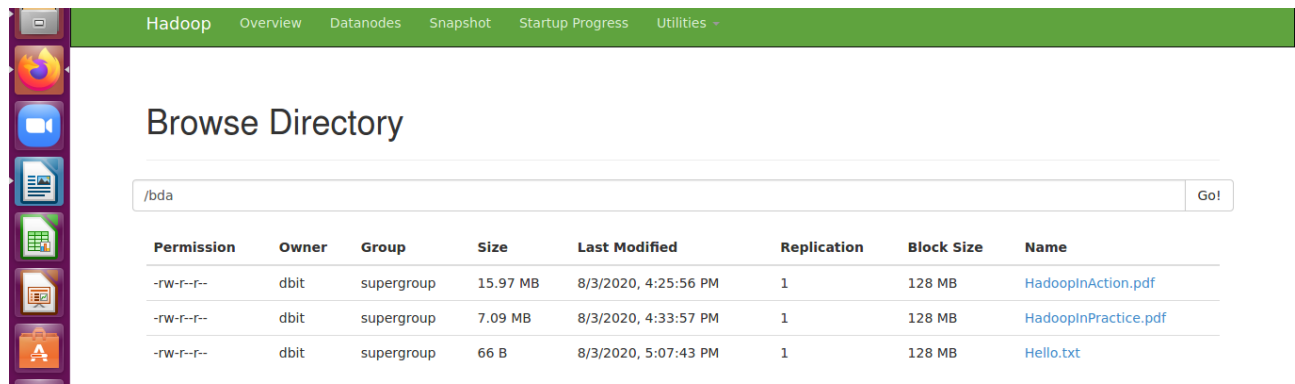
Browse Directory

/bda Go!

Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name
-rw-r--r--	dbit	supergroup	15.97 MB	8/3/2020, 4:25:56 PM	1	128 MB	HadoopInAction.pdf
-rw-r--r--	dbit	supergroup	7.09 MB	8/3/2020, 4:33:57 PM	1	128 MB	HadoopInPractice.pdf

After command:

```
hadoop fs -cp /Hello.txt /bda/
```



Hadoop Overview Datanodes Snapshot Startup Progress Utilities

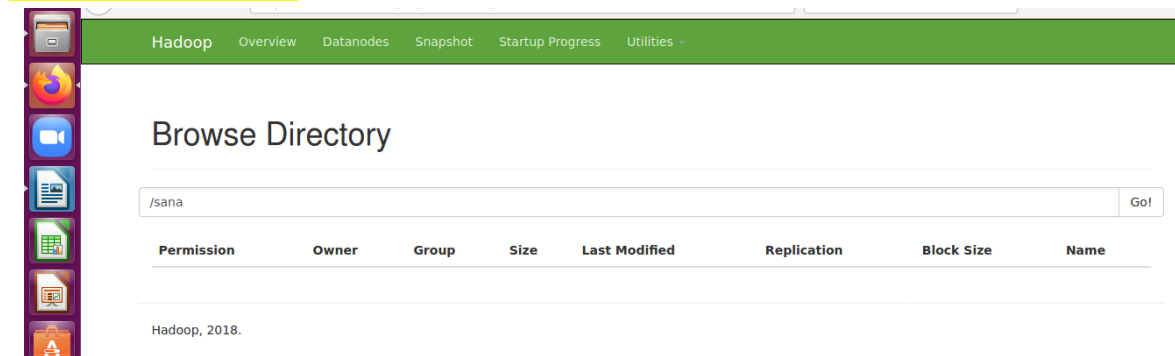
Browse Directory

/bda Go!

Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name
-rw-r--r--	dbit	supergroup	15.97 MB	8/3/2020, 4:25:56 PM	1	128 MB	HadoopInAction.pdf
-rw-r--r--	dbit	supergroup	7.09 MB	8/3/2020, 4:33:57 PM	1	128 MB	HadoopInPractice.pdf
-rw-r--r--	dbit	supergroup	66 B	8/3/2020, 5:07:43 PM	1	128 MB	Hello.txt

8. mv: This command is used for moving a file from one directory to another directory within the HDFS file system.

Before command:



Hadoop Overview Datanodes Snapshot Startup Progress Utilities

Browse Directory

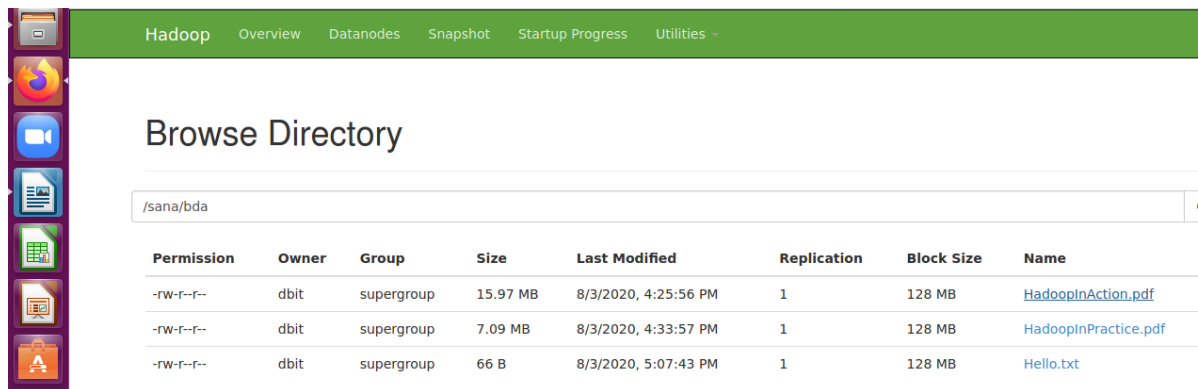
/sana Go!

Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name
Hadoop, 2018.							

After

command:

```
hadoop fs -mv /bda /sana
```



Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name
-rw-r--r--	dbit	supergroup	15.97 MB	8/3/2020, 4:25:56 PM	1	128 MB	HadoopInAction.pdf
-rw-r--r--	dbit	supergroup	7.09 MB	8/3/2020, 4:33:57 PM	1	128 MB	HadoopInPractice.pdf
-rw-r--r--	dbit	supergroup	66 B	8/3/2020, 5:07:43 PM	1	128 MB	Hello.txt

Try out following commands during Lab session:

rm - it is used for removing a file from the HDFS file system.

rm -r: This command deletes a file from HDFS *recursively*. It is very useful command when you want to delete a *non-empty directory*.

tail - This command is used to show the last 1KB of the file

stat - This command is used to print the statistics about the file/directory in the specified format

appendToFile - This command appends the contents of all the given local files to the provided destination file on the HDFS filesystem.

```
hadoop fs -appendToFile Desktop/hi1.txt Desktop/hi2.txt  
Desktop/hi3.txt /hi.txt
```

setrep - Change replication factor from 1 to 2

```
hadoop fs -setrep -R 4 /sana      (applied on all files)
```

```
hadoop fs -setrep -R -w 6 /sana/hello.txt (applied on specific file)
```

text - takes the source file and outputs the file in the **text** format. It detects the encoding of the file and decodes it to plain **text**.

df - it is used to show the capacity, free and used space available on the HDFS filesystem.

du - it is used to show the amount of space in bytes that have been used by the files that match the specified file pattern

du -s: This command will give the total size of directory/file.

hadoop fs -du -s /

Count - This command is used to count the number of directories, files, and bytes under the path that matches the provided file pattern.

hadoop -fs count /

touchz: It creates an empty file.