UCS 548 Foundation of Data Science

Assignment 10

Perform the following operations in HDFS file system

1. Create a directory in HDFS at given path(s).

2. List the contents of a directory.

3. Upload and download a file in HDFS.

4. See contents of a file

5. Copy a file from source to destination

6. Copy a file from/To Local file system to HDFS

7. Move file from source to destination.

8. Remove a file or directory in HDFS.

9. Display last few lines of a file.

10. Display the aggregate length of a file.

1. Create a directory in HDFS at given path(s).

```
Usage:
hadoop fs -mkdir <paths>
Example:
hadoop fs -mkdir /user/saurzcode/dir1 /user/saurzcode/dir2
```

2. List the contents of a directory.

```
Usage :
hadoop fs -ls <args>
Example:
hadoop fs -ls /user/saurzcode
```

3. Upload and download a file in HDFS.

Upload:

hadoop fs -put:

Copy single src file, or multiple src files from local file system to the Hadoop data file system

```
Usage:
hadoop fs -put <localsrc> ... <HDFS_dest_Path>
Example:
hadoop fs -put /home/saurzcode/Samplefile.txt  /user/saurzcode/dir3/
```

Download:

hadoop fs -get:

Copies/Downloads files to the local file system

```
Usage:
hadoop fs -get <hdfs_src> <localdst>
Example:
hadoop fs -get /user/saurzcode/dir3/Samplefile.txt /home/
```

4. See contents of a file

Same as unix cat command:

```
Usage:
hadoop fs -cat <path[filename]>
Example:
hadoop fs -cat /user/saurzcode/dir1/abc.txt
```

5. Copy a file from source to destination

This command allows multiple sources as well in which case the destination must be a directory.

```
Usage:
hadoop fs -cp <source> <dest>
Example:
hadoop fs -cp /user/saurzcode/dir1/abc.txt /user/saurzcode/dir2
```

6. Copy a file from/To Local file system to HDFS

copyFromLocal

```
Usage:
hadoop fs -copyFromLocal <localsrc> URI
Example:
hadoop fs -copyFromLocal /home/saurzcode/abc.txt  /user/saurzcode/abc.txt
```

Similar to put command, except that the source is restricted to a local file reference.

copyToLocal

```
Usage:
hadoop fs -copyToLocal [-ignorecrc] [-crc] URI <localdst>
```

Similar to get command, except that the destination is restricted to a local file reference.

7. Move file from source to destination.

Note:- Moving files across filesystem is not permitted.

```
Usage :
hadoop fs -mv <src> <dest>
Example:
hadoop fs -mv /user/saurzcode/dir1/abc.txt /user/saurzcode/dir2
```

8. Remove a file or directory in HDFS.

Remove files specified as argument. Deletes directory only when it is empty

```
Usage :
hadoop fs -rm <arg>
Example:
hadoop fs -rm /user/saurzcode/dir1/abc.txt
```

Recursive version of delete.

```
Usage :
hadoop fs -rmr <arg>
Example:
hadoop fs -rmr /user/saurzcode/
```

9. Display last few lines of a file.

Similar to tail command in Unix.

```
Usage :
hadoop fs -tail <path[filename]>
Example:
hadoop fs -tail /user/saurzcode/dir1/abc.txt
```

10. Display the aggregate length of a file.

```
Usage :
hadoop fs -du <path>
Example:
hadoop fs -du /user/saurzcode/dir1/abc.txt
```