

Roll No: 5117060

EXPERIMENT 01

Aim: To Implement Commands in Hadoop

Ouput:

1. fsck

```
[cloudera@quickstart ~]$ hdfs fsck /
Connecting to namenode via http://quickstart.cloudera:50070
FSCK started by cloudera (auth:SIMPLE) from /10.0.2.15 for path / at Tue Nov 17 01:38:40 PST 2020
.....
.....Status: HEALTHY
Total size: 396188316 B (Total open files size: 166 B)
Total dirs: 91
Total files: 395
Total symlinks: 0 (Files currently being written: 2)
Total blocks (validated): 390 (avg. block size 1015867 B) (Total open file blocks (not validated): 2)
Minimally replicated blocks: 390 (100.0 %)
Over-replicated blocks: 0 (0.0 %)
Under-replicated blocks: 0 (0.0 %)
Mis-replicated blocks: 0 (0.0 %)
Default replication factor: 1
Average block replication: 1.0
Corrupt blocks: 0
Missing replicas: 0 (0.0 %)
Number of data-nodes: 1
Number of racks: 1
FSCK ended at Tue Nov 17 01:38:40 PST 2020 in 159 milliseconds

The filesystem under path '/' is HEALTHY
```

2. ls

```
[cloudera@quickstart ~]$ hdfs dfs -ls /
Found 5 items
drwxr-xr-x - hbase supergroup 0 2020-11-17 00:49 /hbase
drwxr-xr-x - solr solr 0 2015-06-09 03:38 /solr
drwxrwxrwx - hdfs supergroup 0 2020-10-17 11:41 /tmp
drwxr-xr-x - hdfs supergroup 0 2015-06-09 03:38 /user
drwxr-xr-x - hdfs supergroup 0 2015-06-09 03:36 /var
[cloudera@quickstart ~]$ █
```

3. touchz

```
[cloudera@quickstart ~]$ hdfs dfs -touchz /user/cloudera/b.txt
[cloudera@quickstart ~]$ hdfs dfs -ls /user/cloudera
Found 7 items
-rw-r--r-- 1 cloudera cloudera 174693 2020-10-17 12:03 /user/cloudera/a.txt
-rw-r--r-- 1 cloudera cloudera 0 2020-11-17 01:55 /user/cloudera/b.txt
drwxr-xr-x - cloudera cloudera 0 2020-10-17 11:56 /user/cloudera/out
drwxr-xr-x - cloudera cloudera 0 2020-10-17 12:06 /user/cloudera/out1
drwxr-xr-x - cloudera cloudera 0 2020-10-17 12:15 /user/cloudera/out2
-rw-r--r-- 1 cloudera cloudera 5458199 2020-10-17 11:45 /user/cloudera/words.txt
-rw-r--r-- 1 cloudera cloudera 0 2020-11-17 01:49 /user/cloudera/words1.txt
[cloudera@quickstart ~]$ █
```

4. mkdir

```
[cloudera@quickstart ~]$ hdfs dfs -mkdir Shivam
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 8 items
drwxr-xr-x   - cloudera cloudera           0 2020-11-17 01:56 Shivam
-rw-r--r--   1 cloudera cloudera      174693 2020-10-17 12:03 a.txt
-rw-r--r--   1 cloudera cloudera           0 2020-11-17 01:55 b.txt
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 11:56 out
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 12:06 out1
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 12:15 out2
-rw-r--r--   1 cloudera cloudera    5458199 2020-10-17 11:45 words.txt
-rw-r--r--   1 cloudera cloudera           0 2020-11-17 01:49 words1.txt
[cloudera@quickstart ~]$
```

5. copyFromLocal

```
[cloudera@quickstart ~]$ cd Downloads
[cloudera@quickstart Downloads]$ ls
a.txt  big-data-2  big-data-2.zip  local1.txt  local.txt  lucene-5.5.0  lucene-5.5.0.tgz  words.txt
```

```
[cloudera@quickstart Downloads]$ hdfs dfs -copyFromLocal words.txt /user/cloudera/Shivam
[cloudera@quickstart Downloads]$ hdfs dfs -ls /user/cloudera
Found 8 items
drwxr-xr-x   - cloudera cloudera           0 2020-11-17 02:02 /user/cloudera/Shivam
-rw-r--r--   1 cloudera cloudera      174693 2020-10-17 12:03 /user/cloudera/a.txt
-rw-r--r--   1 cloudera cloudera           0 2020-11-17 01:55 /user/cloudera/b.txt
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 11:56 /user/cloudera/out
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 12:06 /user/cloudera/out1
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 12:15 /user/cloudera/out2
-rw-r--r--   1 cloudera cloudera    5458199 2020-10-17 11:45 /user/cloudera/words.txt
-rw-r--r--   1 cloudera cloudera           0 2020-11-17 01:49 /user/cloudera/words1.txt
[cloudera@quickstart Downloads]$ hdfs dfs -ls /user/cloudera/Shivam
Found 1 items
-rw-r--r--   1 cloudera cloudera    5458199 2020-11-17 02:02 /user/cloudera/Shivam/words.txt
[cloudera@quickstart Downloads]$
```

6. copyToLocal

```
[cloudera@quickstart ~]$ ls
cloudera-manager  Desktop  Downloads  enterprise-deployment.json  kerberos  Music  Public  Videos
cn_api.py         Documents  eclipse     express-deployment.json    lib       Pictures  Templates  workspace
[cloudera@quickstart ~]$ hdfs dfs -copyToLocal /user/cloudera/Shivam/words.txt b.txt
[cloudera@quickstart ~]$ ls
b.txt  cn_api.py  Documents  eclipse     express-deployment.json  lib  Pictures  Templates  workspace
cloudera-manager  Desktop  Downloads  enterprise-deployment.json  kerberos  Music  Public  Videos
[cloudera@quickstart ~]$
```

7. put

```
[cloudera@quickstart Downloads]$ hdfs dfs -put local1.txt /user/cloudera/Shivam/
[cloudera@quickstart Downloads]$ hdfs dfs -ls /user/cloudera/Shivam/
Found 2 items
-rw-r--r--   1 cloudera cloudera      61791 2020-11-17 02:14 /user/cloudera/Shivam/local1.txt
-rw-r--r--   1 cloudera cloudera    5458199 2020-11-17 02:02 /user/cloudera/Shivam/words.txt
[cloudera@quickstart Downloads]$
```

8. get

```
[cloudera@quickstart Downloads]$ cd ..
[cloudera@quickstart ~]$ ls
b.txt  cn_api.py  Documents  eclipse     express-deployment.json  lib  Pictures  Templates  workspace
cloudera-manager  Desktop  Downloads  enterprise-deployment.json  kerberos  Music  Public  Videos
[cloudera@quickstart ~]$ hdfs dfs -get /user/cloudera/Shivam/local1.txt local1.txt
[cloudera@quickstart ~]$ ls
b.txt  cn_api.py  Documents  eclipse     express-deployment.json  lib  Music  Public  Videos
cloudera-manager  Desktop  Downloads  enterprise-deployment.json  kerberos  local1.txt  Pictures  Templates  workspace
[cloudera@quickstart ~]$
```

9. count

```
[cloudera@quickstart ~]$ hdfs dfs -count /user/cloudera/Shivam/
      1      2      5519990 /user/cloudera/Shivam
[cloudera@quickstart ~]$ hdfs dfs -ls /user/cloudera/Shivam/
Found 2 items
-rw-r--r--  1 cloudera cloudera    61791 2020-11-17 02:14 /user/cloudera/Shivam/local1.txt
-rw-r--r--  1 cloudera cloudera   5458199 2020-11-17 02:02 /user/cloudera/Shivam/words.txt
[cloudera@quickstart ~]$
```

10. rm

```
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 8 items
drwxr-xr-x  - cloudera cloudera      0 2020-11-17 02:14 Shivam
-rw-r--r--  1 cloudera cloudera   174693 2020-10-17 12:03 a.txt
-rw-r--r--  1 cloudera cloudera      0 2020-11-17 01:55 b.txt
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 11:56 out
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 12:06 out1
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 12:15 out2
-rw-r--r--  1 cloudera cloudera   5458199 2020-10-17 11:45 words.txt
-rw-r--r--  1 cloudera cloudera      0 2020-11-17 01:49 words1.txt
[cloudera@quickstart ~]$ hdfs dfs -rm words1.txt
20/11/17 04:09:02 INFO fs.TrashPolicyDefault: Namenode trash configuration: Deletion interval = 0 minutes, Empty interval = 0 minutes.
Deleted words1.txt
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 7 items
drwxr-xr-x  - cloudera cloudera      0 2020-11-17 02:14 Shivam
-rw-r--r--  1 cloudera cloudera   174693 2020-10-17 12:03 a.txt
-rw-r--r--  1 cloudera cloudera      0 2020-11-17 01:55 b.txt
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 11:56 out
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 12:06 out1
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 12:15 out2
-rw-r--r--  1 cloudera cloudera   5458199 2020-10-17 11:45 words.txt
[cloudera@quickstart ~]$
```

11. cp

```
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 7 items
drwxr-xr-x  - cloudera cloudera      0 2020-11-17 02:14 Shivam
-rw-r--r--  1 cloudera cloudera   174693 2020-10-17 12:03 a.txt
-rw-r--r--  1 cloudera cloudera      0 2020-11-17 01:55 b.txt
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 11:56 out
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 12:06 out1
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 12:15 out2
-rw-r--r--  1 cloudera cloudera   5458199 2020-10-17 11:45 words.txt
[cloudera@quickstart ~]$ hdfs dfs -cp words.txt words3.txt
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 8 items
drwxr-xr-x  - cloudera cloudera      0 2020-11-17 02:14 Shivam
-rw-r--r--  1 cloudera cloudera   174693 2020-10-17 12:03 a.txt
-rw-r--r--  1 cloudera cloudera      0 2020-11-17 01:55 b.txt
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 11:56 out
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 12:06 out1
drwxr-xr-x  - cloudera cloudera      0 2020-10-17 12:15 out2
-rw-r--r--  1 cloudera cloudera   5458199 2020-10-17 11:45 words.txt
-rw-r--r--  1 cloudera cloudera   5458199 2020-11-17 04:10 words3.txt
[cloudera@quickstart ~]$
```

12. mv

```
[cloudera@quickstart ~]$ hdfs dfs -mv words3.txt /user/cloudera/Shivam
[cloudera@quickstart ~]$ hdfs dfs -ls /user/cloudera/Shivam/
Found 3 items
-rw-r--r--  1 cloudera cloudera    61791 2020-11-17 02:14 /user/cloudera/Shivam/local1.txt
-rw-r--r--  1 cloudera cloudera   5458199 2020-11-17 02:02 /user/cloudera/Shivam/words.txt
-rw-r--r--  1 cloudera cloudera   5458199 2020-11-17 04:10 /user/cloudera/Shivam/words3.txt
[cloudera@quickstart ~]$
```

13. rmdir

```
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 8 items
drwxr-xr-x   - cloudera cloudera           0 2020-11-17 04:13 Shivam
-rw-r--r--   1 cloudera cloudera    174693 2020-10-17 12:03 a.txt
-rw-r--r--   1 cloudera cloudera           0 2020-11-17 01:55 b.txt
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 11:56 out
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 12:06 out1
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 12:15 out2
drwxr-xr-x   - cloudera cloudera           0 2020-11-17 04:16 temp
-rw-r--r--   1 cloudera cloudera    5458199 2020-10-17 11:45 words.txt
[cloudera@quickstart ~]$ hdfs dfs -rmdir temp
[cloudera@quickstart ~]$ hdfs dfs -ls
Found 7 items
drwxr-xr-x   - cloudera cloudera           0 2020-11-17 04:13 Shivam
-rw-r--r--   1 cloudera cloudera    174693 2020-10-17 12:03 a.txt
-rw-r--r--   1 cloudera cloudera           0 2020-11-17 01:55 b.txt
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 11:56 out
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 12:06 out1
drwxr-xr-x   - cloudera cloudera           0 2020-10-17 12:15 out2
-rw-r--r--   1 cloudera cloudera    5458199 2020-10-17 11:45 words.txt
[cloudera@quickstart ~]$ █
```