

Assignment – HDFS

1. View the contents of the user's root

ls -a

output:

```
[anabig11425@ip-10-1-1-204 ~]$ ls -a
.      .bash_history  .bash_profile kohil      purplecow  tscm
..     .bash_logout  .bashrc      .oracle_jre_usage rcb        .viminfo
```

2. Create a directory named test in HDFS

hdfs dfs -mkdir test

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -ls
```

3. Verify the folder was created successfully

hdfs dfs -ls

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -mkdir test
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -ls
Found 6 items
drwx----- - anabig11425 anabig11425      0 2022-04-12 10:00 .Trash
-rw-r--r--  3 anabig11425 anabig11425      0 2022-04-11 09:58 rcb
drwxr-xr-x   - anabig11425 anabig11425      0 2022-04-12 06:23 sai
drwxr-xr-x   - anabig11425 anabig11425      0 2022-04-12 06:15 shakespeare.tar
drwxr-xr-x   - anabig11425 anabig11425      0 2022-04-12 12:14 test
drwxr-xr-x   - anabig11425 anabig11425      0 2022-04-11 10:03 virat
```

4. Create a couple of subdirectories of test:

test/test1

test/test2

test/test2/test3

hdfs dfs -mkdir test/test1

hdfs dfs -mkdir test/test2

hdfs dfs -mkdir test/test2/test3

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -mkdir test/test1
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -mkdir test/test2
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -mkdir test/test2/test3
```

5. View the contents of the user's root recursively

ls -R

output:

```
[anabig11425@ip-10-1-1-204 ~]$ ls -R
.:
kohil  purplecow  rcb  tscm
```

6. Delete the **test2** folder

hdfs dfs -rmdir test2

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -rmdir test/test2
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -ls test
Found 1 items
drwxr-xr-x  - anabig11425 anabig11425          0 2022-04-12 12:16 test/test1
```

7. Create a new directory sics on HDFS.

hdfs dfs -mkdir sics

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -mkdir sics
[anabig11425@ip-10-1-1-204 ~]$
```

8. Create a file, name it big, on your local filesystem and upload it to HDFS under sics.

vi big

hdfs dfs -put big sics

output:

```
[anabig11425@ip-10-1-1-204 ~]$ vi big
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -put big sics
```

9. View the content of sics directory.

hdfs dfs -ls sics

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -ls sics
Found 1 items
-rw-r--r--  3 anabig11425 anabig11425          0 2022-04-12 12:30 sics/big
```

10. Determine the size of big on HDFS.

```
hdfs dfs -du -h sics/big
```

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -du -h sics/big  
0 0 sics/big
```

11. Print the first 5 lines to screen from big on HDFS.

```
hdfs dfs -cat sics/big | head -n 5
```

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -cat sics/big | head -n 5
```

12. Copy big to big hdfs copy on HDFS.

```
hdfs dfs -cp sics/big sics/big_hdfscopy
```

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -cp sics/big sics/big_hdfscopy
```

13. Copy big back to local filesystem and name it big localcopy.

```
hdfs dfs -get sics/big big_localcopy
```

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -get sics/big big_localcopy
```

14. Check the entire HDFS filesystem for inconsistencies/problems.

hdfs fsck

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs fsck
```

15. Delete big from HDFS.

hdfs dfs -rm sics/big

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -rm sics/big
22/04/12 12:59:12 INFO fs.TrashPolicyDefault: Moved: 'hdfs://nameservice1/user/anabig11425/sics/big' to trash at: hdfs://nameservice1/user/anabig11425/.Trash/Current/user/anabig11425/sics/big
```

16. 16. Delete /sics directory from HDFS.

hdfs dfs -rm -r sics

output:

```
[anabig11425@ip-10-1-1-204 ~]$ hdfs dfs -rm -r sics
rm: `ir': No such file or directory
rm: `sics': Is a directory
```