

ASSIGNMENT - 2

CSP - 554 BIG DATA TECHNOLOGIES

9. (2 points) Execute the following hdfs command to list the files or directories that are listed (also indicating which is a file and which a directory):

`hadoop fs -ls /`

Executed Command → “`hadoop fs -ls /`”

```
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -ls /
Found 4 items
drwxr-xr-x - hdfs hdfsadmingroup 0 2024-09-02 21:17 /apps
drwxrwxrwt - hdfs hdfsadmingroup 0 2024-09-02 21:20 /tmp
drwxr-xr-x - hdfs hdfsadmingroup 0 2024-09-02 21:17 /user
drwxr-xr-x - hdfs hdfsadmingroup 0 2024-09-02 21:17 /var
[hadoop@ip-172-31-0-217 ~]$ |
```

10. (2 points) Execute a command (you needed to figure out which one) to list the files and directories under the hdfs directory listed below:

`/user`

Executed Command → “`hadoop fs -ls /user`”

```
drwxr-xr-x - hdfs hdfsadmingroup 0 2024-09-02 21:17 /user
drwxr-xr-x - hdfs hdfsadmingroup 0 2024-09-02 21:17 /var
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -ls /user
Found 6 items
drwxrwxrwx - hadoop hdfsadmingroup 0 2024-09-02 21:17 /user/hadoop
drwxr-xr-x - mapred mapred 0 2024-09-02 21:17 /user/history
drwxrwxrwx - hdfs hdfsadmingroup 0 2024-09-02 21:17 /user/hive
drwxrwxrwx - hue hue 0 2024-09-02 21:17 /user/hue
drwxrwxrwx - oozie oozie 0 2024-09-02 21:18 /user/oozie
drwxrwxrwx - root hdfsadmingroup 0 2024-09-02 21:17 /user/root
[hadoop@ip-172-31-0-217 ~]$ |
```

11. (2 points) Execute a command to create the following HDFS directory:
`/user/csp554`

Executed Commands →

`"hadoop fs -mkdir /user/csp554"`

`"hadoop fs -ls /user"`

```
drwxrwxrwx - root hdfsadmingroup 0 2024-09-02 21:17 /user/root
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -mkdir /user/csp554
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -mkdir /user/csp554-2
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -ls /user
Found 8 items
drwxr-xr-x - hadoop hdfsadmingroup 0 2024-09-02 21:31 /user/csp554
drwxr-xr-x - hadoop hdfsadmingroup 0 2024-09-02 21:31 /user/csp554-2
drwxrwxrwx - hadoop hdfsadmingroup 0 2024-09-02 21:17 /user/hadoop
drwxr-xr-x - mapred mapred 0 2024-09-02 21:17 /user/history
drwxrwxrwx - hdfs hdfsadmingroup 0 2024-09-02 21:17 /user/hive
drwxrwxrwx - hue hue 0 2024-09-02 21:17 /user/hue
drwxrwxrwx - oozie oozie 0 2024-09-02 21:18 /user/oozie
drwxrwxrwx - root hdfsadmingroup 0 2024-09-02 21:17 /user/root
[hadoop@ip-172-31-0-217 ~]$
```

12. (2 points) Execute a command to create the following HDFS directory:
`/user/csp554-2`

Executed Commands →

`"hadoop fs -mkdir /user/csp554-2"`

`"hadoop fs -ls /user"`

```
drwxrwxrwx - root hdfsadmingroup 0 2024-09-02 21:17 /user/root
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -mkdir /user/csp554
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -mkdir /user/csp554-2
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -ls /user
Found 8 items
drwxr-xr-x - hadoop hdfsadmingroup 0 2024-09-02 21:31 /user/csp554
drwxr-xr-x - hadoop hdfsadmingroup 0 2024-09-02 21:31 /user/csp554-2
drwxrwxrwx - hadoop hdfsadmingroup 0 2024-09-02 21:17 /user/hadoop
drwxr-xr-x - mapred mapred 0 2024-09-02 21:17 /user/history
drwxrwxrwx - hdfs hdfsadmingroup 0 2024-09-02 21:17 /user/hive
drwxrwxrwx - hue hue 0 2024-09-02 21:17 /user/hue
drwxrwxrwx - oozie oozie 0 2024-09-02 21:18 /user/oozie
drwxrwxrwx - root hdfsadmingroup 0 2024-09-02 21:17 /user/root
[hadoop@ip-172-31-0-217 ~]$
```

13. (2 points) Execute a command that copies a given local file to the given hdfs directory :

Source local file: /home/hadoop/myname.txt (where the actual name is your name as described above)

Destination HDFS directory: /user/csp554

Executed Commands →

“hadoop fs -put /home/hadoop/akhilkumarmarni.txt /user/csp554”

“hadoop fs -ls /user/csp554”

```
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -put /home/hadoop/akhilkumarmarni.txt /user/csp554
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -ls /user/csp554
Found 1 items
-rw-r--r-- 1 hadoop hdfsadmin group      23 2024-09-02 22:41 /user/csp554/akhilkumarmarni.txt
[hadoop@ip-172-31-0-217 ~]$
```

“hadoop fs -cat /user/csp554/akhilkumarmarni.txt”

```
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -put /home/hadoop/akhilkumarmarni.txt /user/csp554
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -ls /user/csp554
Found 1 items
-rw-r--r-- 1 hadoop hdfsadmin group      23 2024-09-02 22:41 /user/csp554/akhilkumarmarni.txt
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -cat /user/csp554/akhilkumarmarni.txt
this is the name file
```

14. (2 points) Copy a file from one hdfs directory to another hdfs directory and write down the command

Source hdfs file: /user/csp554/myname.txt (where the actual name is your name as described above)

Destination HDFS directory: /user/csp554-2

Executed Commands →

'hadoop fs -put /home/hadoop/akhilkumarmarni.txt /user/csp554-2'

"hadoop fs -ls /user/csp554-2"

"hadoop fs -cat /user/csp554-2/akhilkumarmarni.txt"

```
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -cp /user/csp554/akhilkumarmarni.txt /user/csp554-2
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -ls /user/csp554-2
Found 1 items
-rw-r--r-- 1 hadoop hdfsadmin group 23 2024-09-02 22:47 /user/csp554-2/akhilkumarmarni.txt
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -cat /user/csp554-2/akhilkumarmarni.txt
this is the name file
[hadoop@ip-172-31-0-217 ~]$
```

15. (2 points) Copy the object myid.txt you uploaded to an S3 bucket into the Hadoop master node Linux file system. The actual object includes your student id as above.

aws s3 cp s3://mybucket/myid.txt /home/hadoop/myid.txt

Executed Commands →

'aws s3 cp s3://akhilkumarmarnibucket/A20554334.txt /home/hadoop/A20554334.txt'

"cat A20554334.txt"

```
Unknown options: /home/hadoop/A20554334.txt
[hadoop@ip-172-31-0-217 ~]$ aws s3 cp s3://akhilkumarmarnibucket/A20554334.txt /home/hadoop/A20554334.txt
download: s3://akhilkumarmarnibucket/A20554334.txt to ./A20554334.txt
[hadoop@ip-172-31-0-217 ~]$ ls
A20554334.txt  akhilkumarmarni.txt
[hadoop@ip-172-31-0-217 ~]$ cat A20554334.txt
this is the id file
[hadoop@ip-172-31-0-217 ~]$
```

16. (2 points) Copy the same object myid.txt you created in an S3 bucket into HDFS into the directory

/users/csp554

hadoop fs -cp s3://mybucket/myid.txt hdfs:///user/csp554-2

Executed Commands →

'hadoop fs -cp s3://akhilkumarmarnibucket/A20554334.txt hdfs:///user/csp554-2'

"hadoop fs -ls /user/csp554-2"

```
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -cp s3://akhilkumarmarnibucket/A20554334.txt hdfs:///user/csp554-2
2024-09-02 23:05:17,530 INFO s3n.S3NativeFileSystem: Opening 's3://akhilkumarmarnibucket/A20554334.txt' for reading
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -ls /user/csp554-2
Found 2 items
-rw-r--r--  1 hadoop hdfsadmin  group      21 2024-09-02 23:05 /user/csp554-2/A20554334.txt
-rw-r--r--  1 hadoop hdfsadmin  group     23 2024-09-02 22:47 /user/csp554-2/akhilkumarmarni.txt
[hadoop@ip-172-31-0-217 ~]$
```

17. (2 points) Execute a command to show the contents of the myid.txt file in the hdfs directory

/user/csp554-2

Executed Command →

"hadoop fs -cat /user/csp554-2/A20554334.txt"

```
[hadoop@ip-172-31-0-217 ~]$ hadoop fs -cat /user/csp554-2/A20554334.txt
this is the id file

[hadoop@ip-172-31-0-217 ~]$
```


18. (2 points) Execute a command to remove the myid.txt file in the hdfs directory /user/csp554-2

Clue: look up about how to use the “rm” command in the file system shell document

Executed Commands →

“hadoop fs -rm /user/csp554-2/A20554334.txt”

“hadoop fs -ls /user/csp554-2”

```
[hadoop@ip-172-31-71-11 ~]$ hadoop fs -rm /user/csp554-2/A20554334.txt
Deleted /user/csp554-2/A20554334.txt
[hadoop@ip-172-31-71-11 ~]$ hadoop fs -ls /user/csp554-2
Found 1 items
-rw-r--r-- 1 hadoop hdfsadmingroup      23 2024-09-03 00:15 /user/csp554-2/akhilkumarmarni.txt
[hadoop@ip-172-31-71-11 ~]$
```

-----THE END-----