

9) 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 /`

Answer:

The command '`hadoop fs -ls /`' is used to list files or directories, in the below screenshot `/apps`, `/temp`, `/user`, `/var` are the directories and the screenshot has no files.

The first character '`d`' tells that it is a directory and not a file.

```
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -ls /
Found 4 items
drwxr-xr-x   - hdfs hdfsadmingroup      0 2023-09-14 20:08 /apps
drwxrwxrwt   - hdfs hdfsadmingroup      0 2023-09-14 20:12 /tmp
drwxr-xr-x   - hdfs hdfsadmingroup      0 2023-09-14 20:08 /user
drwxr-xr-x   - hdfs hdfsadmingroup      0 2023-09-14 20:08 /var
```

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

Answer:

The command to list files and directories under the hdfs directory `/user` is:

**`hadoop fs -ls /user`**

```
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -ls /user
Found 6 items
drwxrwxrwx   - hadoop hdfsadmingroup      0 2023-09-14 20:08 /user/hadoop
drwxr-xr-x   - mapred mapred              0 2023-09-14 20:08 /user/history
drwxrwxrwx   - hdfs hdfsadmingroup      0 2023-09-14 20:08 /user/hive
drwxrwxrwx   - hue hue                  0 2023-09-14 20:08 /user/hue
drwxrwxrwx   - oozie oozie              0 2023-09-14 20:11 /user/oozie
drwxrwxrwx   - root hdfsadmingroup      0 2023-09-14 20:08 /user/root
```

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

Answer:

The command to create `/user/csp554` hdfs directory is:

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

`mkdir` -> stands for 'make directory'

```
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -mkdir /user/csp554
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -ls /user
Found 7 items
drwxr-xr-x   - hadoop hdfsadmingroup      0 2023-09-14 20:17 /user/csp554
drwxrwxrwx   - hadoop hdfsadmingroup      0 2023-09-14 20:08 /user/hadoop
drwxr-xr-x   - mapred mapred              0 2023-09-14 20:08 /user/history
drwxrwxrwx   - hdfs hdfsadmingroup      0 2023-09-14 20:08 /user/hive
drwxrwxrwx   - hue hue                  0 2023-09-14 20:08 /user/hue
drwxrwxrwx   - oozie oozie              0 2023-09-14 20:11 /user/oozie
drwxrwxrwx   - root hdfsadmingroup      0 2023-09-14 20:08 /user/root
```

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

Answer:

The command to create /user/csp554-2 hdfs directory is:

**hadoop fs -mkdir / user/csp554-2**

mkdir -> stands for 'make directory'

```
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -mkdir /user/csp554-2
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -ls /user
Found 8 items
drwxr-xr-x - hadoop hdfsadmingroup 0 2023-09-14 20:17 /user/csp554
drwxr-xr-x - hadoop hdfsadmingroup 0 2023-09-14 20:17 /user/csp554-2
drwxrwxrwx - hadoop hdfsadmingroup 0 2023-09-14 20:08 /user/hadoop
drwxr-xr-x - mapred mapred 0 2023-09-14 20:08 /user/history
drwxrwxrwx - hdfs hdfsadmingroup 0 2023-09-14 20:08 /user/hive
drwxrwxrwx - hue hue 0 2023-09-14 20:08 /user/hue
drwxrwxrwx - oozie oozie 0 2023-09-14 20:11 /user/oozie
drwxrwxrwx - root hdfsadmingroup 0 2023-09-14 20:08 /user/root
```

13) 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

Answer:

The command that copies a local file to hdfs directory is:

**hadoop fs -copyFromLocal /home/hadoop/manogna.txt /user/csp554**

```
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -copyFromLocal /home/hadoop/manogna.txt /user/csp554
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -ls /user/csp554
Found 1 items
-rw-r--r-- 1 hadoop hdfsadmingroup 22 2023-09-14 20:20 /user/csp554/manogna.txt
```

14) 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

Answer:

The command to copy file from one hdfs directory to another hdfs directory is:

**hadoop fs -cp /user/csp554/manogna.txt /user/csp554-2**

```
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -cp /user/csp554/manogna.txt /user/csp554-2
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -ls /user/csp554-2
Found 1 items
-rw-r--r-- 1 hadoop hdfsadmingroup 22 2023-09-14 20:21 /user/csp554-2/manogna.txt
```

15) 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:

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

After you executed the above command perform an “ls /home/hadoop”

Answer:

The screenshot after executing ‘ls/home/hadoop’ is :

```
[hadoop@ip-172-31-10-183 ~]$ aws s3 cp s3://manogna/a20551908.txt /home/hadoop/a20551908.txt
download: s3://manogna/a20551908.txt to ./a20551908.txt
[hadoop@ip-172-31-10-183 ~]$ ls /home/hadoop
a20551908.txt  manogna.txt
```

16) 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
```

After you executed the above command, execute another command (you needed to figure out which one) to list the files and directories under the hdfs directory listed below: /user/csp554-2

Answer:

The command to list the files and directories under the hdfs directory /user/csp554-2 is:

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

```
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -cp s3://manogna/a20551908.txt hdfs:///user/csp554-2
2023-09-14 20:26:49,781 INFO s3n.S3NativeFileSystem: Opening 's3://manogna/a20551908.txt' for reading
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -ls /user/csp554-2
Found 2 items
-rw-r--r--  1 hadoop hdfsadmingroup    21 2023-09-14 20:26 /user/csp554-2/a20551908.txt
-rw-r--r--  1 hadoop hdfsadmingroup    22 2023-09-14 20:21 /user/csp554-2/manogna.txt
```

17) Execute a command to show the contents of the myid.txt file in the hdfs directory /user/csp554-2

Answer:

The command to show contents of a20551908.txt file in hdfs directory /user/csp554-2 is:

**hadoop fs -cat /user/csp554-2/a20551908.txt**

```
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -cat /user/csp554-2/a20551908.txt
this is the id file
```

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

Write down the command you executed, then list the content of the /user/csp554-2 HDFS directory.

Answer:

The command to remove the a20551908.txt file in the hdfs directory /user/csp554-2 is:

**hadoop fs -rm /user/csp554-2/a20551908.txt**

The command to list the contents of the file /user/csp554-2 is:

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

```
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -rm /user/csp554-2/a20551908.txt
Deleted /user/csp554-2/a20551908.txt
[hadoop@ip-172-31-10-183 ~]$ hadoop fs -ls /user/csp554-2
Found 1 items
-rw-r--r--  1 hadoop hdfsadmingroup      22 2023-09-14 20:21 /user/csp554-2/
manogna.txt
```