

### Task 1:

Check whether /user/acadgild directory exists or not in the HDFS.

If it doesn't exist, then create this.

Create a directory /user/acadgild/hadoop.

**Using the Hadoop fs -ls command checked for the existing of the directories and since not found, created the directory and the subdirectories using the Hadoop fs -mkdir command**

This script is Deprecated. Instead use start-dfs.sh and start-yarn.sh

18/11/28 20:15:25 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Starting namenodes on [localhost]

localhost: starting namenode, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/logs/hadoop-acadgild-namenode-localhost.localdomain.out

localhost: starting datanode, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/logs/hadoop-acadgild-datanode-localhost.localdomain.out

Starting secondary namenodes [0.0.0.0]

0.0.0.0: starting secondarynamenode, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/logs/hadoop-acadgild-secondarynamenode-localhost.localdomain.out

18/11/28 20:16:08 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

starting yarn daemons

starting resourcemanager, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/logs/yarn-acadgild-resourcemanager-localhost.localdomain.out

localhost: starting nodemanager, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/logs/yarn-acadgild-nodemanager-localhost.localdomain.out

You have new mail in /var/spool/mail/acadgild

[acadgild@localhost ~]\$

You have new mail in /var/spool/mail/acadgild

[acadgild@localhost ~]\$ hadoop fs -ls /user/acadgild/hadoop

18/11/28 20:21:46 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

ls: `/user/acadgild/hadoop': No such file or directory

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -ls/user/acadgild
```

-ls/user/acadgild: Unknown command

```
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild
```

18/11/28 20:22:44 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

ls: `/user/acadgild': No such file or directory

```
[acadgild@localhost ~]$ hadoop fs -ls /user
```

18/11/28 20:23:45 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 1 items

```
drwxr-xr-x - acadgild supergroup      0 2018-02-09 14:50 /user/hive
```

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -mkdir /user/acadgild
```

18/11/28 20:24:48 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -ls /user
```

18/11/28 20:25:09 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 2 items

```
drwxr-xr-x - acadgild supergroup      0 20
```

18-11-28 20:24 /user/acadgild

```
drwxr-xr-x - acadgild supergroup      0 2018-02-09 14:50 /user/hive
```

```
[acadgild@localhost ~]$ hadoop fs -mkdir /user/acadgild/hadoop
```

18/11/28 20:25:48 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild
```

18/11/28 20:26:25 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 1 items

drwxr-xr-x - acadgild supergroup 0 2018-11-28 20:25 /user/acadgild/hadoop

[acadgild@localhost ~]\$

You have new mail in /var/spool/mail/acadgild

## Task 2:

Create a file in HDFS under directory /user/acadgild/hadoop, with name word-count.txt.

Whatever we type on screen should get appended to the file.

Try to type (on screen) few lines from any online article or textbook.

**Created the file word-count.txt using the Hadoop fs -touchz command  
Created a file in the local fs using cat command and then using Hadoop -put command copied to the HDFS**

[acadgild@localhost ~]\$ hadoop fs -touchz /user/acadgild/hadoop/word-count.txt

18/11/28 20:27:59 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

[acadgild@localhost ~]\$ hadoop fs -ls /user/acadgild/hadoop

18/11/28 20:28:30 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 1 items

-rw-r--r-- 1 acadgild supergroup 0 2018-11-28 20:28 /user/acadgild/hadoop/word-count.txt

You have new mail in /var/spool/mail/acadgild

[acadgild@localhost ~]\$ echo "hello... welcome to the assignment" | hadoop fs -put -f - /user/acadgild/hadoop/word-count.txt

18/11/28 20:31:45 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

You have new mail in /var/spool/mail/acadgild

[acadgild@localhost ~]\$ hadoop fs -cat /user/acadgild/hadoop/word-count.txt

18/11/28 20:32:37 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

hello... welcome to the assignment

```
[acadgild@localhost ~]$ cat > inputfromstdin.txt
```

There will be two Name nodes. One active and one passive. If the name node which is active fails then the one which is passive becomes active. This is called high availability.^C

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -put inputfromstdin.txt
```

18/11/28 20:35:51 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

```
[acadgild@localhost ~]$ hadoop fs -put inputfromstdin.txt /user/acadgild/hadoop
```

18/11/28 20:36:36 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
```

18/11/28 20:37:29 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 2 items

```
-rw-r--r--  1 acadgild supergroup      0 2018-11-28 20:36 /user/acadgild/hadoop/inputfromstdin.txt
```

```
-rw-r--r--  1 acadgild supergroup    35 2018-11-28 20:31 /user/acadgild/hadoop/word-count.txt
```

```
[acadgild@localhost ~]$ hadoop fs -rm /user/acadgild/hadoop/word-count.txt
```

18/11/28 20:38:26 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

18/11/28 20:38:28 INFO fs.TrashPolicyDefault: Namenode trash configuration: Deletion interval = 0 minutes, Empty interval = 0 minutes.

Deleted /user/acadgild/hadoop/word-count.txt

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -mv /user/acadgild/hadoop/inputfromstdin.txt
/user/acadgild/hadoop/word-count.txt
```

18/11/28 20:39:38 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
```

```
18/11/28 20:40:46 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

```
Found 1 items
```

```
-rw-r--r--  1 acadgild supergroup      0 2018-11-28 20:36 /user/acadgild/hadoop/word-count.txt
```

You have new mail in /var/spool/mail/acadgild

### Task 3:

Create a file max-temp.txt in local FS.

Put some 10-15 records of date and temperature example:

dd-mm-yyyy,temperature

Example:

10-01-1990,10

10-02-1991,20

Big Data Hadoop and Spark Development

Move this file to HDFS at /user/acadgild/hadoop.

**Created a file using the cat command in the local fs, added 20-25 lines of date and temp info and using the Hadoop fs -put command copied the file to the desired directory**

```
[acadgild@localhost ~]$ cat > max-temp.txt
```

01-01-2018, 15

02-01-2018,14

03-01-2018,14

^C

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ rm max-temp.txt
```

```
[acadgild@localhost ~]$ cat > max-temp.txt
```

01-01-2018,15

02-01-2018,14

03-01-2018,14

04-01-2018,16

05-01-2018,15

06-01-2018,13

07-01-2018,14

08-01-2018,19

09-01-2018,11

10-01-2018,14

11-01-2018,15

12-01-2018,13

13-01-2018,15

14-01-2018,12

15-01-2018,13

^C

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -put max-temp.txt /user/acadgild/hadoop
```

18/11/28 20:47:43 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

#### Task 4:

Change the permission of the file /user/acadgild/hadoop/max-temp.txt, such that only the owner and

the group members have full control over the file.

Others do not have any control over it.

**Changed the permissions of the file using the Hadoop fs -chmod command and provided complete control to user and group and read only permission to others. Verified the permission status using the Hadoop fs -ls command**

```
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
```

18/11/28 20:48:13 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 2 items

```
-rw-r--r-- 1 acadgild supergroup    210 2018-11-28 20:47 /user/acadgild/hadoop/max-temp.txt
```

```
-rw-r--r-- 1 acadgild supergroup      0 2018-11-28 20:36 /user/acadgild/hadoop/word-count.txt
```

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -chmod 774 /user/acadgild/hadoop/max-temp.txt
```

18/11/28 20:49:38 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
```

18/11/28 20:50:03 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 2 items

```
-rwxrwxr-- 1 acadgild supergroup    210 2018-11-28 20:47 /user/acadgild/hadoop/max-temp.txt
```

```
-rw-r--r-- 1 acadgild supergroup      0 2018-11-28 20:36 /user/acadgild/hadoop/word-count.txt
```

```
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
```

18/11/28 20:58:56 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

Found 2 items

```
-rwxrwxr-- 1 acadgild supergroup    210 2018-11-28 20:47 /user/acadgild/hadoop/max-temp.txt
```

```
-rw-r--r-- 1 acadgild supergroup      0 2018-11-28 20:36 /user/acadgild/hadoop/word-count.txt
```

You have new mail in /var/spool/mail/acadgild

```
[acadgild@localhost ~]$
```

## Screen shots

```
[acadgild@localhost ~]$ start-all.sh
This script is Deprecated. Instead use start-dfs.sh and start-yarn.sh
18/11/28 20:15:25 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
Starting namenodes on [localhost]
localhost: starting namenode, logging to /home/acadgild/install/hadoop/hadoop-2.
6.5/logs/hadoop-acadgild-namenode-localhost.localdomain.out
localhost: starting datanode, logging to /home/acadgild/install/hadoop/hadoop-2.
6.5/logs/hadoop-acadgild-datanode-localhost.localdomain.out
Starting secondary namenodes [0.0.0.0]
0.0.0.0: starting secondarynamenode, logging to /home/acadgild/install/hadoop/ha
dooop-2.6.5/logs/hadoop-acadgild-secondarynamenode-localhost.localdomain.out
18/11/28 20:16:08 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
starting yarn daemons
starting resourcemanager, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/
logs/yarn-acadgild-resourcemanager-localhost.localdomain.out
localhost: starting nodemanager, logging to /home/acadgild/install/hadoop/hadoo
p-2.6.5/logs/yarn-acadgild-nodemanager-localhost.localdomain.out
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ █

[acadgild@localhost ~]$
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
18/11/28 20:21:46 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java
classes where applicable
ls: '/user/acadgild/hadoop': No such file or directory
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild
-ls/user/acadgild: Unknown command
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild
18/11/28 20:22:44 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java
classes where applicable
ls: '/user/acadgild': No such file or directory
[acadgild@localhost ~]$ hadoop fs -ls /user
18/11/28 20:23:45 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java
classes where applicable
Found 1 items
drwxr-xr-x - acadgild supergroup          0 2018-02-09 14:50 /user/hive
[acadgild@localhost ~]$ hadoop fs -mkdir /user/acadgild/hadoop
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classes where applicable
Found 1 items
drwxr-xr-x - acadgild supergroup          0 2018-11-28 20:25 /user/acadgild/hadoop
[acadgild@localhost ~]$
[acadgild@localhost ~]$ hadoop fs -touchz /user/acadgild/hadoop/word-count.txt
18/11/28 20:27:59 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java
classes where applicable
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
18/11/28 20:28:30 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java
classes where applicable
Found 1 items
-rw-r--r-- 1 acadgild supergroup          0 2018-11-28 20:28 /user/acadgild/hadoop/word-count.txt
[acadgild@localhost ~]$ echo "hello... welcome to the assignment" | hadoop fs -put -f - /user/acadgild/hadoop/word-count.txt
18/11/28 20:31:45 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java
classes where applicable
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -cat /user/acadgild/hadoop/word-count.txt
18/11/28 20:32:37 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java
classes where applicable
hello... welcome to the assignment
```



```
[acadgild@localhost ~]$ cat > inputfromstdin.txt
There will be two Name nodes. One active and one passive. If the name node which is active fails then the one which is
passive becomes active. This is called high availability.^C
You have new mail in /var/spool/mail/acadgild
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18/11/28 20:35:51 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
[acadgild@localhost ~]$ hadoop fs -put inputfromstdin.txt /user/acadgild/hadoop
18/11/28 20:36:36 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
18/11/28 20:37:29 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
Found 2 items
-rw-r--r-- 1 acadgild supergroup      0 2018-11-28 20:36 /user/acadgild/hadoop/inputfromstdin.txt
-rw-r--r-- 1 acadgild supergroup    35 2018-11-28 20:31 /user/acadgild/hadoop/word-count.txt
[acadgild@localhost ~]$ hadoop fs -rm /user/acadgild/hadoop/word-count.txt
18/11/28 20:38:26 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
18/11/28 20:38:28 INFO fs.TrashPolicyDefault: Namenode trash configuration: Deletion interval = 0 minutes, Emptier interval
= 0 minutes.
Deleted /user/acadgild/hadoop/word-count.txt
[acadgild@localhost ~]$ hadoop fs -mv /user/acadgild/hadoop/inputfromstdin.txt /user/acadgild/hadoop/word-count.txt
18/11/28 20:39:38 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
18/11/28 20:40:46 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
Found 1 items
-rw-r--r-- 1 acadgild supergroup      0 2018-11-28 20:36 /user/acadgild/hadoop/word-count.txt
```

```
[acadgild@localhost ~]$ cat > max-temp.txt
01-01-2018, 15
02-01-2018,14
03-01-2018,14
^C
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ rm max-temp.txt
[acadgild@localhost ~]$ cat > max-temp.txt
01-01-2018,15
02-01-2018,14
03-01-2018,14
04-01-2018,16
05-01-2018,15
06-01-2018,13
07-01-2018,14
08-01-2018,19
09-01-2018,11
10-01-2018,14
11-01-2018,15
12-01-2018,13
13-01-2018,15
14-01-2018,12
15-01-2018,13|
^C
```

```
[acadgild@localhost ~]$ hadoop fs -put max-temp.txt /user/acadgild/hadoop
18/11/28 20:47:43 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
18/11/28 20:48:13 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
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-rw-r--r-- 1 acadgild supergroup      210 2018-11-28 20:47 /user/acadgild/hadoop/max-temp.txt
-rw-r--r-- 1 acadgild supergroup       0 2018-11-28 20:36 /user/acadgild/hadoop/word-count.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -chmod 774 /user/acadgild/hadoop/max-temp.txt
18/11/28 20:49:38 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
18/11/28 20:50:03 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java
classes where applicable
Found 2 items
-rwxrwxr-- 1 acadgild supergroup      210 2018-11-28 20:47 /user/acadgild/hadoop/max-temp.txt
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You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$
```