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<ul style="list-style-type: none">Nombre del curso: Infraestructura para Big Data		Nombre del profesor: Miguel de Jesús Martínez Felipe
Módulo: 1		Actividad: Actividad 5

1. Utiliza el cluster que creaste en la actividad 4.
2. Con el uso de la terminal (cmd), conéctate al cluster Hadoop utilizando S SH.

```
jesus@jesus:~$ ssh jesus@20.172.66.79
The authenticity of host '20.172.66.79 (20.172.66.79)' can't be established.
ECDSA key fingerprint is SHA256:1bbnpAT7RI3QTdKXQoBdYP+HtD5sCVKgJywwrM/R/ho.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '20.172.66.79' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1054-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

System information as of Fri Mar  1 02:53:33 UTC 2024

System load:  0.0               Processes:            229
Usage of /:   40.5% of 28.89GB   Users logged in:     0
Memory usage: 39%              IPv4 address for eth0: 10.1.0.4
Swap usage:   0%
```

3. Crea los directorios **data** y **lookups** en el HDFS.

```
jesus@jesus:~$ hadoop fs -mkdir /data
2024-03-01 02:56:01,981 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
jesus@jesus:~$
jesus@jesus:~$ hadoop fs -mkdir /lookups
2024-03-01 02:56:03,946 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

4. Crea el directorio **tecmlenio** y dentro de este crea los directorios **sudoku** y **wordcount**.

```
jesus@jesus:~$ hadoop fs -mkdir /tecmlenio
2024-03-01 02:58:34,520 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
jesus@jesus:~$
jesus@jesus:~$ hadoop fs -mkdir /tecmlenio/sudoku
2024-03-01 02:58:36,450 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
jesus@jesus:~$
jesus@jesus:~$ hadoop fs -mkdir /tecmlenio/wordcount
2024-03-01 02:58:38,376 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

5. Despliega el contenido de los directorios **tecmlenio** y **example/data**.

```
jesus@jesus:~$ hdfs dfs -ls /tecmlenio /example/data
2024-03-01 15:40:43,960 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Found 2 items
drwxr-xr-x - jesus supergroup 0 2024-03-01 02:58 /tecmlenio/sudoku
drwxr-xr-x - jesus supergroup 0 2024-03-01 02:58 /tecmlenio/wordcount
Found 2 items
-rw-r--r-- 1 jesus supergroup 27 2024-03-01 15:37 /example/data/fruits.txt
-rw-r--r-- 1 jesus supergroup 223 2024-03-01 15:37 /example/data/people.json
```

6. Descarga el archivo **fruits.txt** que se encuentra en el directorio **/example/data** del HDFS, con el uso del comando **get** y ponlo en el directorio local **/tmp**.

```
jesus@jesus:~$ hdfs dfs -get /example/data/fruits.txt /tmp
2024-03-01 15:42:15,789 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

7. Copia el archivo **people.json** que se encuentra en el directorio **/example/data** del HDFS, con el uso del comando **copyToLocal** y ponlo en el directorio local **/tmp**.

```
jesus@jesus:~$ hdfs dfs -copyToLocal /example/data/people.json /tmp
2024-03-01 15:43:47,039 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

8. Sube los archivos que acabas de descargar al directorio **/data** en el HDFS con el uso del comando **put**.

```
jesus@jesus:~$ hdfs dfs -put /tmp/fruits.txt /tmp/people.json /data
2024-03-01 15:44:56,165 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

9. Sube el archivo **fruits.txt** que descargaste en el paso 6 y súbelo al directorio **/tecmlenio/wordcount** en el HDFS con el uso del comando **copyFromLocal**.

```
jesus@jesus:~$ hdfs dfs -copyFromLocal /tmp/fruits.txt /tecmlenio/wordcount
2024-03-01 15:45:39,696 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

10. Despliega el contenido del archivo **fruits.txt** que se encuentra en el directorio **/data** del HDFS.

```
jesus@jesus:~$ hdfs dfs -cat /data/fruits.txt
2024-03-01 15:46:06,383 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
manzana
pera
platano
fresa
```

11. Mueve el archivo **fruits.txt** del directorio **/tecmlenio/wordcount** al directorio **/lookups** en el HDFS.

```
jesus@jesus:~$ hdfs dfs -mv /tecmlenio/wordcount/fruits.txt /lookups
2024-03-01 15:47:17,717 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

12. Copia el archivo **people.json** del directorio **/data** al directorio **/tecmlenio/wordcount**.

```
jesus@jesus:~$ hdfs dfs -cp /data/people.json /tecmlenio/wordcount
2024-03-01 15:47:50,505 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
```

13. Remueve el archivo **people.json** del directorio **/tecmlenio/wordcount** y remueve el directorio **/tecmlenio**.

```
jesus@jesus:~$ hdfs dfs -rm /tecmlenio/wordcount/people.json
2024-03-01 15:48:30,348 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Deleted /tecmlenio/wordcount/people.json
jesus@jesus:~$ hdfs dfs -rmdir /tecmlenio
2024-03-01 15:48:50,503 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
rmdir: '/tecmlenio': Directory is not empty
jesus@jesus:~$ hdfs dfs -rmdir /tecmlenio^C
jesus@jesus:~$ hdfs dfs -rm -r /tecmlenio
2024-03-01 15:51:00,512 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Deleted /tecmlenio
```