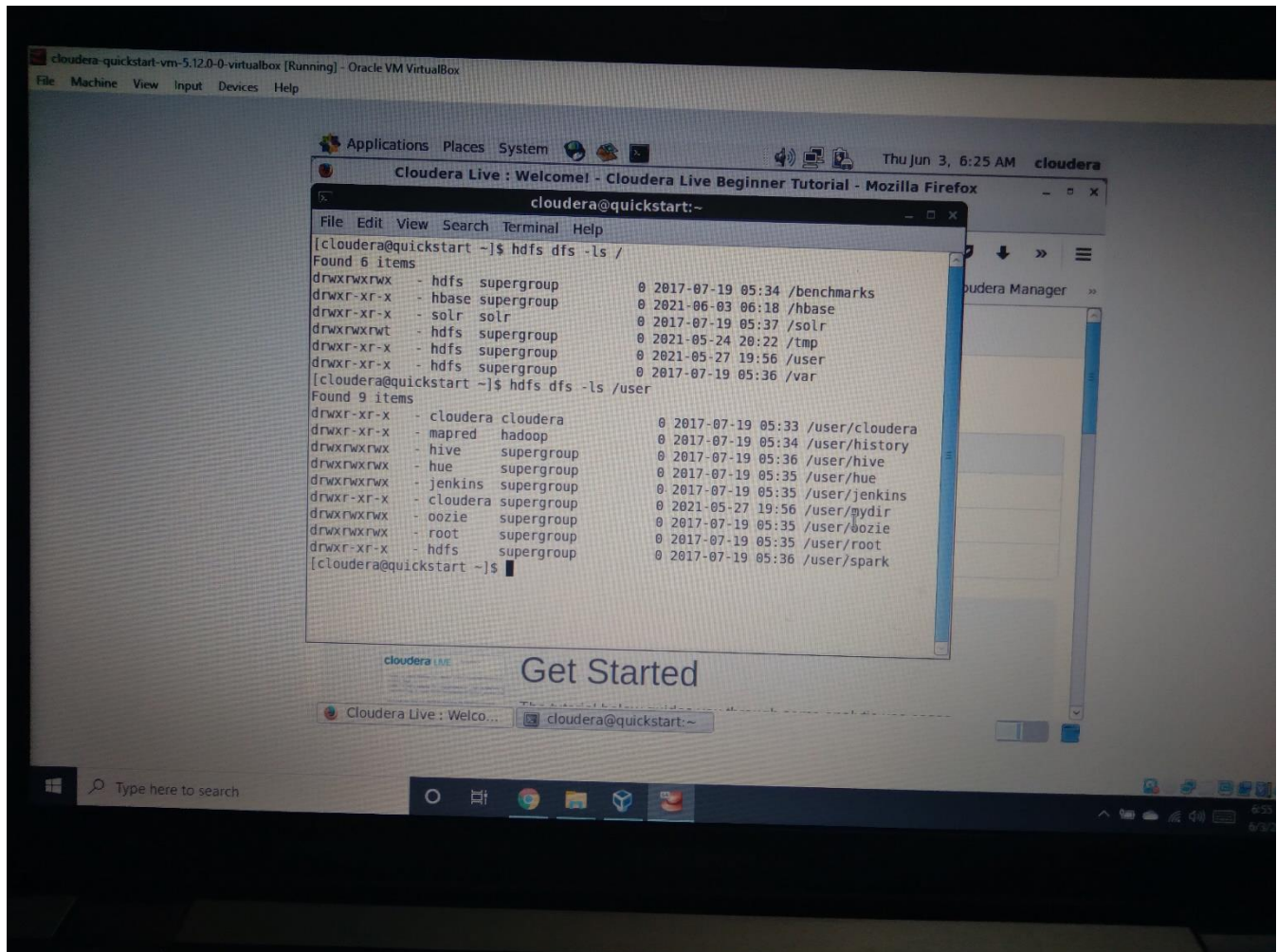
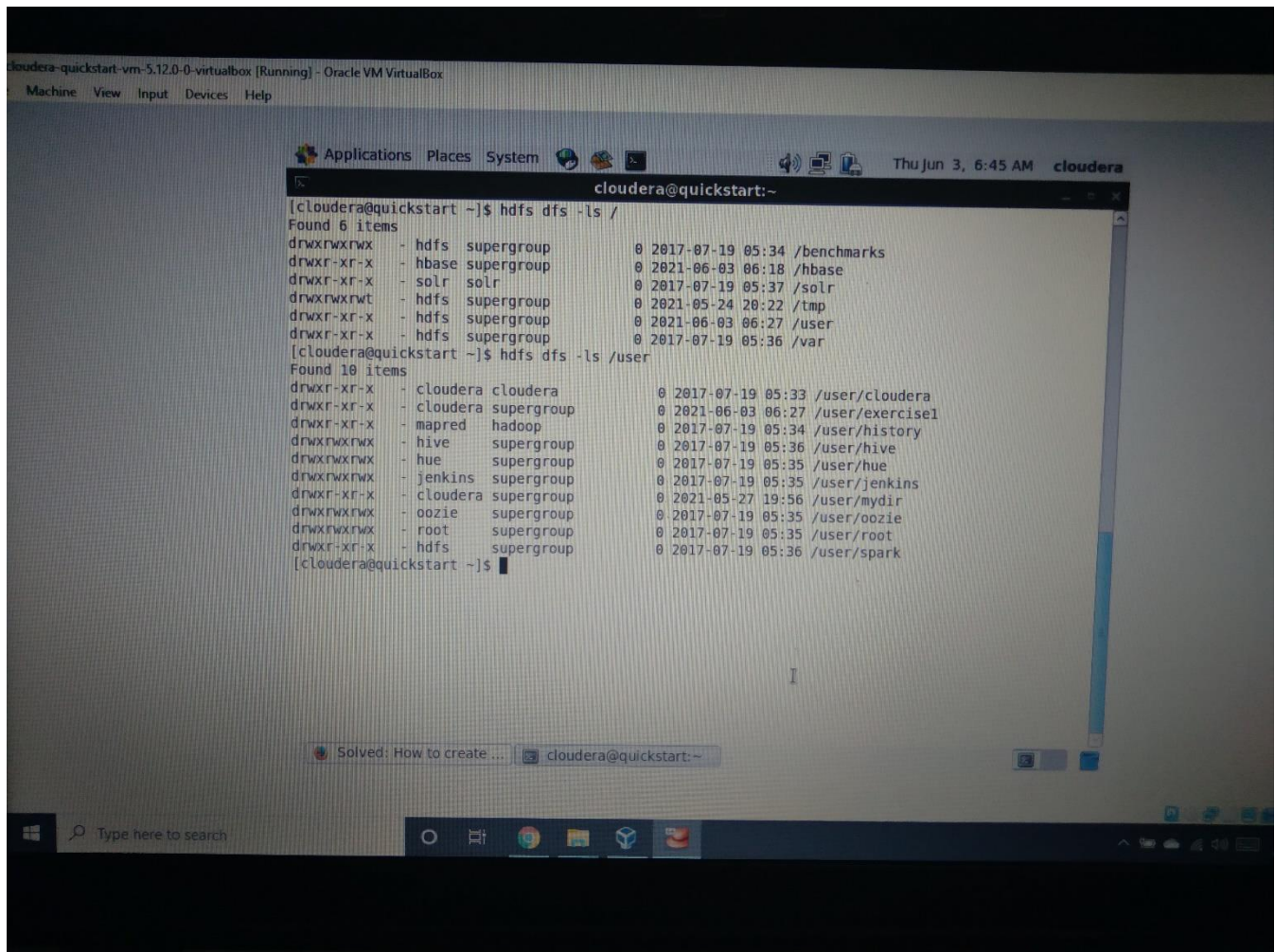


Task to perform

Verify HDFS is running



Created directory exercise1 and check under user



The screenshot shows a terminal window titled "cloudera@quickstart:~" within an Oracle VM VirtualBox environment. The terminal displays two HDFS directory listings. The first command is `hdfs dfs -ls /`, which lists the root directory contents. The second command is `hdfs dfs -ls /user`, which lists the contents of the /user directory, including a subdirectory named "exercise1".

```
[cloudera@quickstart ~]$ hdfs dfs -ls /
Found 6 items
drwxrwxrwx - hdfs supergroup      0 2017-07-19 05:34 /benchmarks
drwxr-xr-x - hbase supergroup     0 2021-06-03 06:18 /hbase
drwxr-xr-x - solr solr            0 2017-07-19 05:37 /solr
drwxrwxrwt - hdfs supergroup      0 2021-05-24 20:22 /tmp
drwxr-xr-x - hdfs supergroup      0 2021-06-03 06:27 /user
drwxr-xr-x - hdfs supergroup      0 2017-07-19 05:36 /var

[cloudera@quickstart ~]$ hdfs dfs -ls /user
Found 10 items
drwxr-xr-x - cloudera cloudera     0 2017-07-19 05:33 /user/cloudera
drwxr-xr-x - cloudera supergroup   0 2021-06-03 06:27 /user/exercise1
drwxr-xr-x - mapred hadoop         0 2017-07-19 05:34 /user/history
drwxrwxrwx - hive supergroup      0 2017-07-19 05:36 /user/hive
drwxrwxrwx - hue supergroup       0 2017-07-19 05:35 /user/hue
drwxrwxrwx - jenkins supergroup    0 2017-07-19 05:35 /user/jenkins
drwxr-xr-x - cloudera supergroup   0 2021-05-27 19:56 /user/mydir
drwxrwxrwx - oozie supergroup      0 2017-07-19 05:35 /user/oozie
drwxrwxrwx - root supergroup       0 2017-07-19 05:35 /user/root
drwxr-xr-x - hdfs supergroup      0 2017-07-19 05:36 /user/spark

[cloudera@quickstart ~]$
```

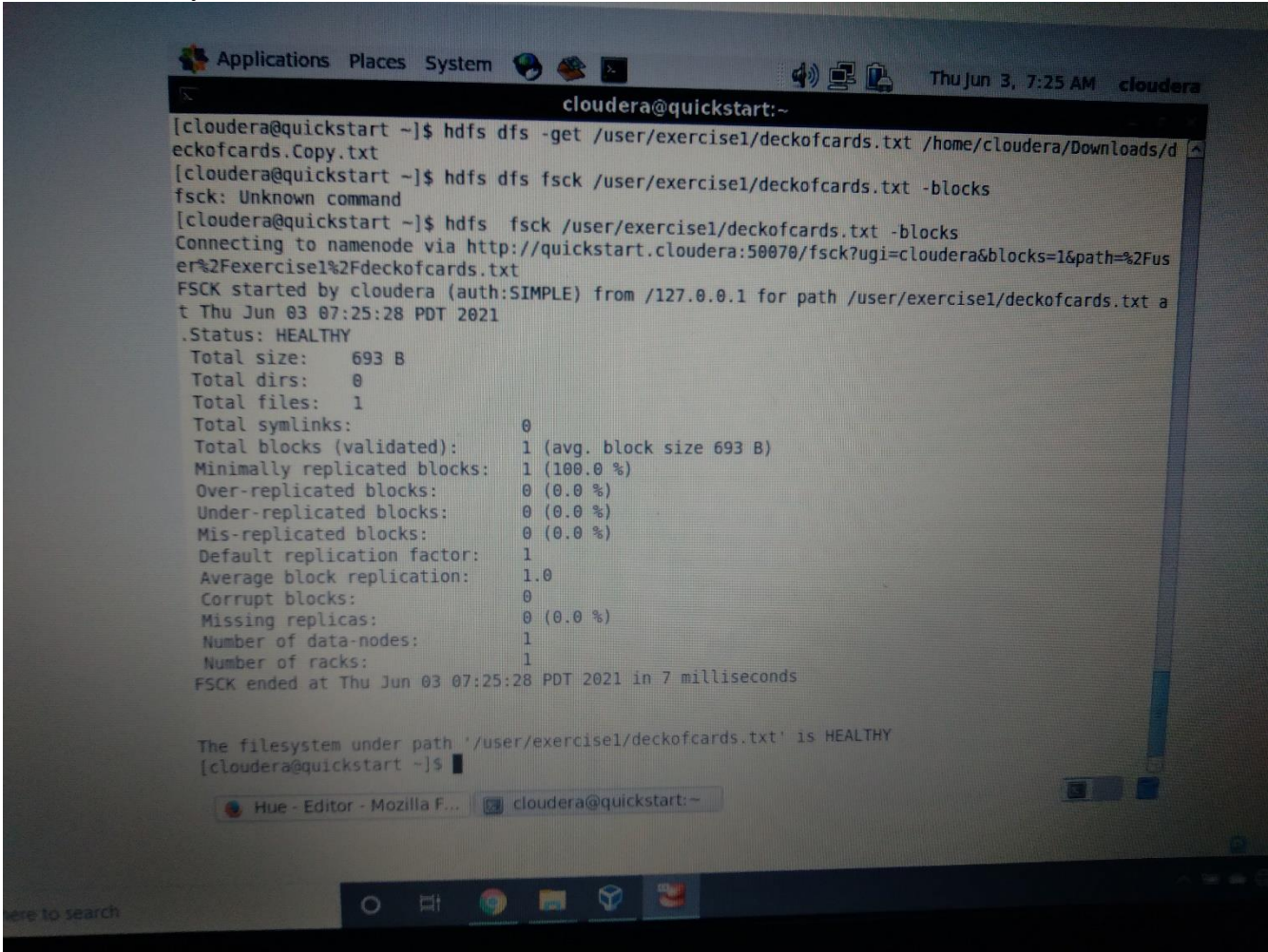
Upload deckofcards.txt to directory exercise1 under user

```
cloudera@quickstart:~$ find /user -type d -ls
Found 6 items
drwxrwxrwx - hdf  supergroup          0 2017-07-19 05:34 /benchmarks
drwxr-xr-x - hbase supergroup          0 2021-06-03 06:18 /hbase
drwxr-xr-x - solr  solr                  0 2017-07-19 05:37 /solr
drwxrwxrwt - hdf  supergroup          0 2021-05-24 20:22 /tmp
drwxr-xr-x - hdf  supergroup          0 2021-06-03 06:27 /user
drwxr-xr-x - hdf  supergroup          0 2017-07-19 05:36 /var
[cloudera@quickstart ~]$ hdfs dfs -ls /user
Found 10 items
drwxr-xr-x - cloudera cloudera          0 2017-07-19 05:33 /user/cloudera
drwxr-xr-x - cloudera supergroup          0 2021-06-03 06:27 /user/exercise1
drwxr-xr-x - mapred  hadoop              0 2017-07-19 05:34 /user/history
drwxrwxrwx - hive   supergroup          0 2017-07-19 05:36 /user/hive
drwxrwxrwx - hue    supergroup          0 2017-07-19 05:35 /user/hue
drwxrwxrwx - jenkins supergroup          0 2017-07-19 05:35 /user/jenkins
drwxr-xr-x - cloudera supergroup          0 2021-05-27 19:56 /user/mydir
drwxrwxrwx - oozie  supergroup          0 2017-07-19 05:35 /user/oozie
drwxrwxrwx - root   supergroup          0 2017-07-19 05:35 /user/root
drwxr-xr-x - hdf  supergroup          0 2017-07-19 05:36 /user/spark
[cloudera@quickstart ~]$ hdfs dfs -put /home/cloudera/Documents/deckofcards.txt/user/exercise1
put: '/home/cloudera/Documents/deckofcards.txt/user/exercise1': No such file or directory
[cloudera@quickstart ~]$ hdfs dfs -ls /user/exercise1
[cloudera@quickstart ~]$ hdfs dfs -ls /user/mydir
[cloudera@quickstart ~]$ hdfs dfs -cat /user/exercise1/deckofcards.txt
cat: '/user/exercise1/deckofcards.txt': No such file or directory
[cloudera@quickstart ~]$ hdfs dfs -put /home/cloudera/Documents/deckofcards.txt /user/exercise1
[cloudera@quickstart ~]$ hdfs dfs -ls /user/exercise1
Found 1 items
-rw-r--r-- 1 cloudera supergroup          693 2021-06-03 06:56 /user/exercise1/deckofcards.txt
[cloudera@quickstart ~]$
```

Hue - Editor - Mozilla F... cloudera@quickstart:~

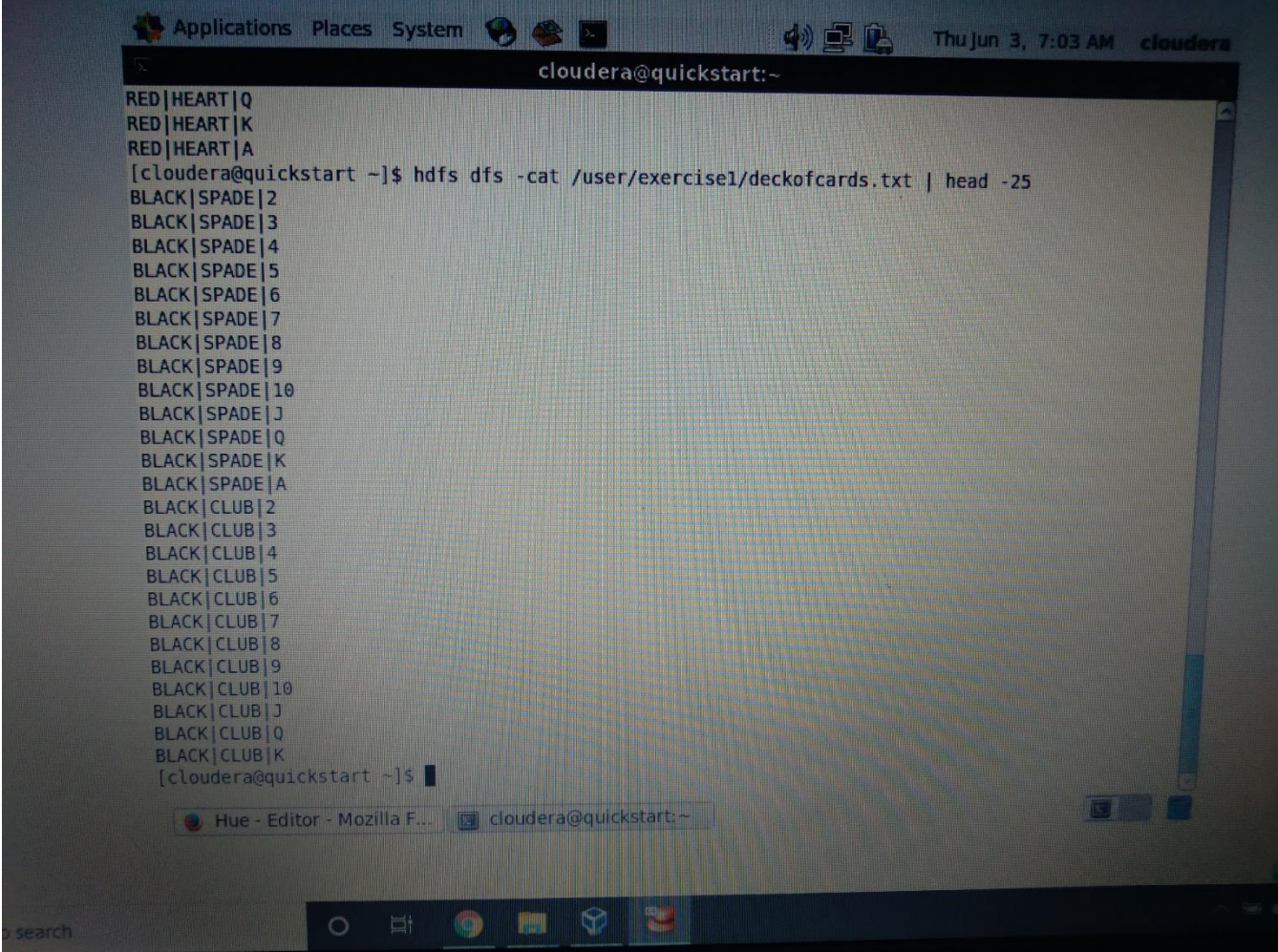


Check details by FSCK



```
cloudera@quickstart:~  
[cloudera@quickstart ~]$ hdfs dfs -get /user/exercisel/deckofcards.txt /home/cloudera/Downloads/deckofcards.Copy.txt  
[cloudera@quickstart ~]$ hdfs dfs fsck /user/exercisel/deckofcards.txt -blocks  
fsck: Unknown command  
[cloudera@quickstart ~]$ hdfs fsck /user/exercisel/deckofcards.txt -blocks  
Connecting to namenode via http://quickstart.cloudera:50070/fsck?ugi=cloudera&blocks=1&path=%2Fuser%2Fexercisel%2Fdeckofcards.txt  
FSCK started by cloudera (auth:SIMPLE) from /127.0.0.1 for path /user/exercisel/deckofcards.txt at Thu Jun 03 07:25:28 PDT 2021  
.Status: HEALTHY  
Total size: 693 B  
Total dirs: 0  
Total files: 1  
Total symlinks: 0  
Total blocks (validated): 1 (avg. block size 693 B)  
Minimally replicated blocks: 1 (100.0 %)  
Over-replicated blocks: 0 (0.0 %)  
Under-replicated blocks: 0 (0.0 %)  
Mis-replicated blocks: 0 (0.0 %)  
Default replication factor: 1  
Average block replication: 1.0  
Corrupt blocks: 0  
Missing replicas: 0 (0.0 %)  
Number of data-nodes: 1  
Number of racks: 1  
FSCK ended at Thu Jun 03 07:25:28 PDT 2021 in 7 milliseconds  
  
The filesystem under path '/user/exercisel/deckofcards.txt' is HEALTHY  
[cloudera@quickstart ~]$
```

Print first 25 lines from deckofcards.txt



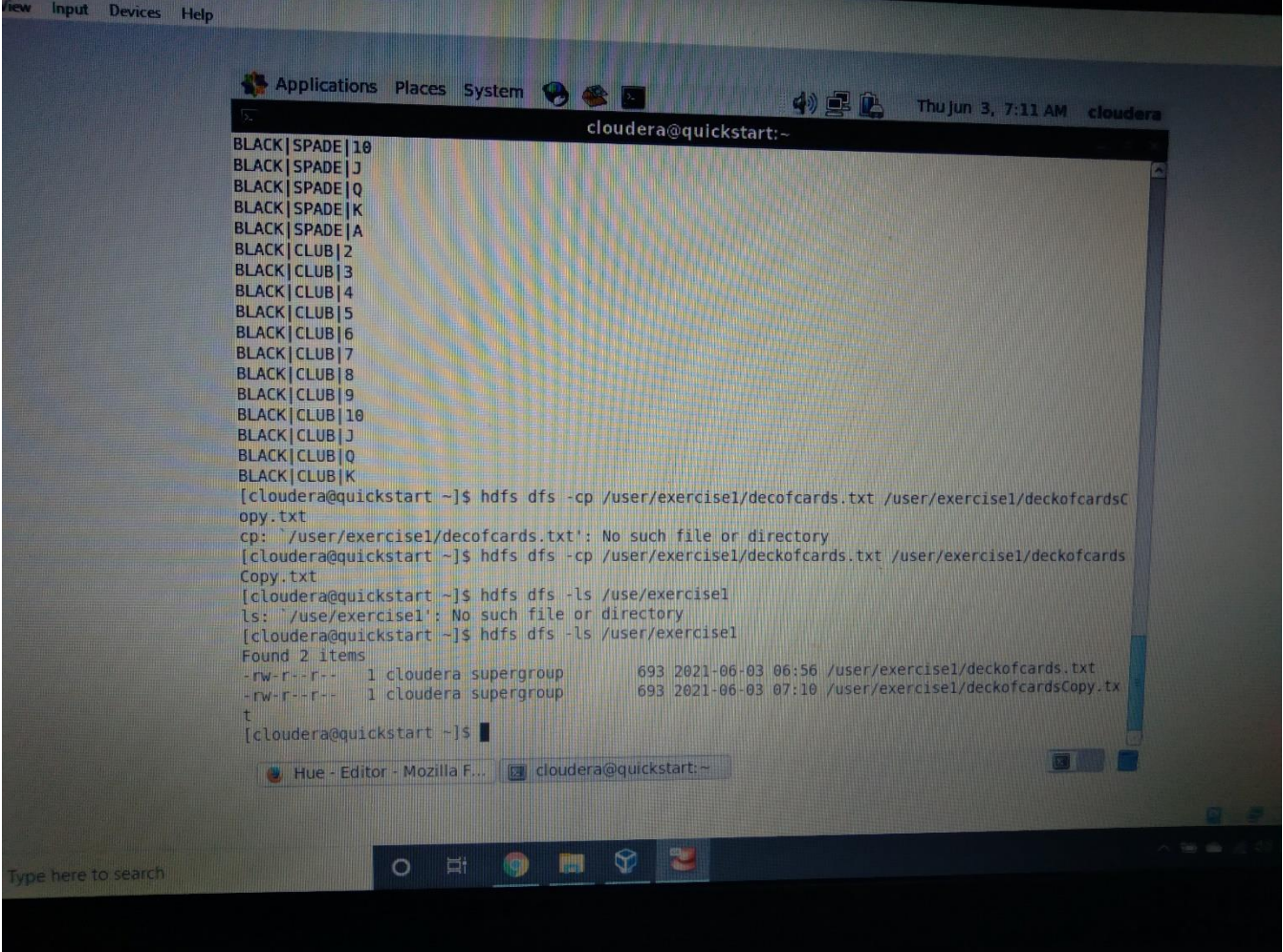
The screenshot shows a terminal window titled "cloudera@quickstart:~". The terminal displays the following text:

```
RED|HEART|Q  
RED|HEART|K  
RED|HEART|A  
[cloudera@quickstart ~]$ hdfs dfs -cat /user/exercise1/deckofcards.txt | head -25  
BLACK|SPADE|2  
BLACK|SPADE|3  
BLACK|SPADE|4  
BLACK|SPADE|5  
BLACK|SPADE|6  
BLACK|SPADE|7  
BLACK|SPADE|8  
BLACK|SPADE|9  
BLACK|SPADE|10  
BLACK|SPADE|J  
BLACK|SPADE|Q  
BLACK|SPADE|K  
BLACK|SPADE|A  
BLACK|CLUB|2  
BLACK|CLUB|3  
BLACK|CLUB|4  
BLACK|CLUB|5  
BLACK|CLUB|6  
BLACK|CLUB|7  
BLACK|CLUB|8  
BLACK|CLUB|9  
BLACK|CLUB|10  
BLACK|CLUB|J  
BLACK|CLUB|Q  
BLACK|CLUB|K  
[cloudera@quickstart ~]$
```

The terminal window is part of a desktop environment with a top bar showing "Applications", "Places", "System", and system status "Thu Jun 3, 7:03 AM cloudera". A taskbar at the bottom contains icons for "Hue - Editor - Mozilla F..." and "cloudera@quickstart:~".



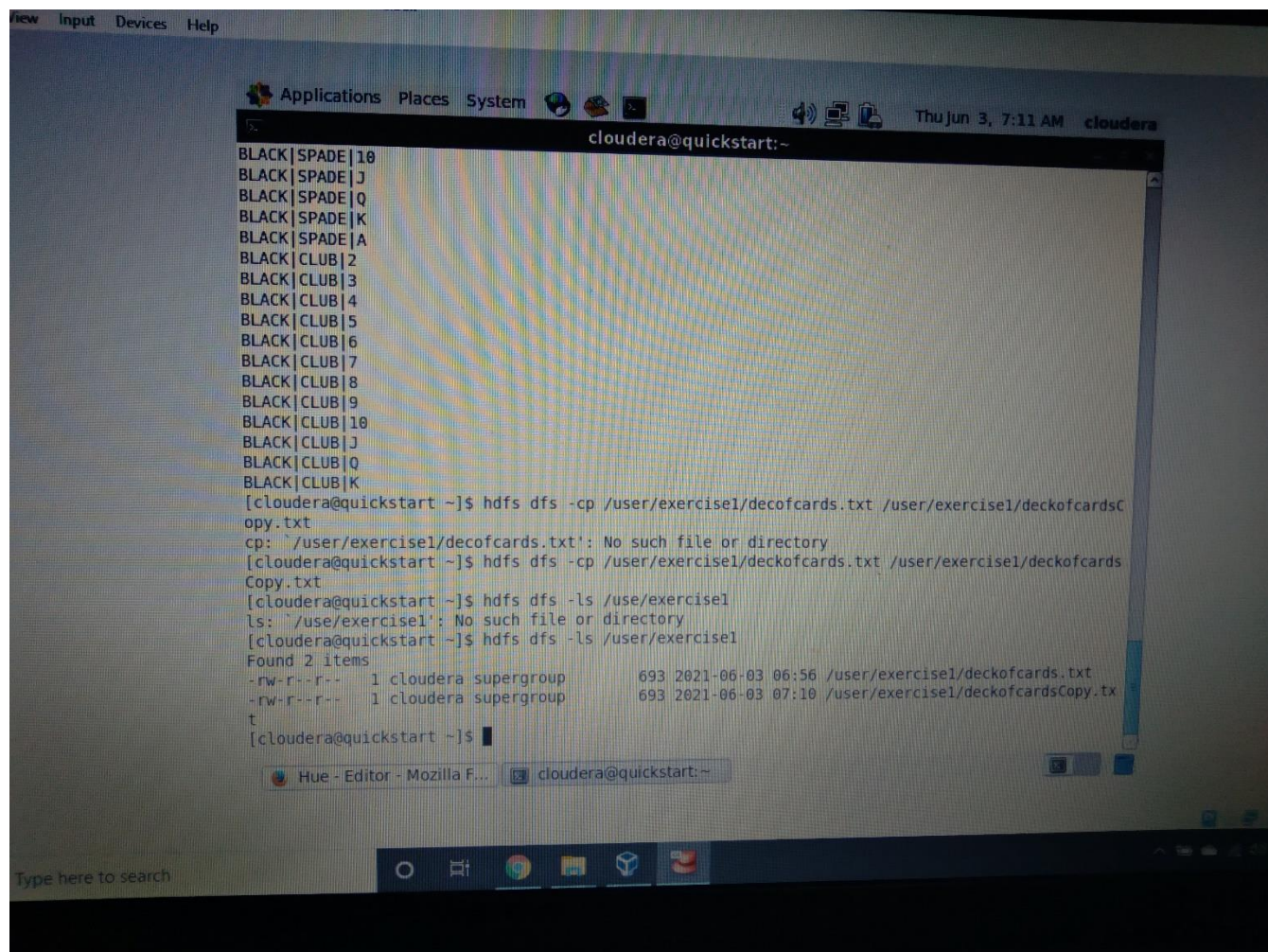
Copy file to new file



The screenshot shows a terminal window titled "cloudera@quickstart:~". The terminal displays a list of 52 playing cards, followed by several HDFS commands and their outputs. The commands attempt to copy a file from "/user/exercisel/decofcards.txt" to "/user/exercisel/deckofcardsCopy.txt". The first command fails with the error "cp: '/user/exercisel/decofcards.txt': No such file or directory". The second command also fails with the same error. The third command, "hdfs dfs -ls /use/exercisel", fails with "ls: '/use/exercisel': No such file or directory". The fourth command, "hdfs dfs -ls /user/exercisel", succeeds and shows two files in the directory. The terminal window has a menu bar with "File", "Input", "Devices", and "Help". The system tray at the bottom shows the date and time as "Thu Jun 3, 7:11 AM" and the username "cloudera".

```
BLACK|SPADE|10
BLACK|SPADE|J
BLACK|SPADE|Q
BLACK|SPADE|K
BLACK|SPADE|A
BLACK|CLUB|2
BLACK|CLUB|3
BLACK|CLUB|4
BLACK|CLUB|5
BLACK|CLUB|6
BLACK|CLUB|7
BLACK|CLUB|8
BLACK|CLUB|9
BLACK|CLUB|10
BLACK|CLUB|J
BLACK|CLUB|Q
BLACK|CLUB|K
[cloudera@quickstart ~]$ hdfs dfs -cp /user/exercisel/decofcards.txt /user/exercisel/deckofcardsCopy.txt
cp: '/user/exercisel/decofcards.txt': No such file or directory
[cloudera@quickstart ~]$ hdfs dfs -cp /user/exercisel/deckofcards.txt /user/exercisel/deckofcardsCopy.txt
[cloudera@quickstart ~]$ hdfs dfs -ls /use/exercisel
ls: '/use/exercisel': No such file or directory
[cloudera@quickstart ~]$ hdfs dfs -ls /user/exercisel
Found 2 items
-rw-r--r-- 1 cloudera supergroup 693 2021-06-03 06:56 /user/exercisel/deckofcards.txt
-rw-r--r-- 1 cloudera supergroup 693 2021-06-03 07:10 /user/exercisel/deckofcardsCopy.txt
[cloudera@quickstart ~]$
```

Copy deckofcards.txt to deckofcardsCopy.txt



The screenshot shows a terminal window titled "cloudera@quickstart:~". The terminal displays a list of 20 playing cards, all of which are black. The cards are listed as follows:

- BLACK|SPADE|10
- BLACK|SPADE|J
- BLACK|SPADE|Q
- BLACK|SPADE|K
- BLACK|SPADE|A
- BLACK|CLUB|2
- BLACK|CLUB|3
- BLACK|CLUB|4
- BLACK|CLUB|5
- BLACK|CLUB|6
- BLACK|CLUB|7
- BLACK|CLUB|8
- BLACK|CLUB|9
- BLACK|CLUB|10
- BLACK|CLUB|J
- BLACK|CLUB|Q
- BLACK|CLUB|K

Below the list, the user enters the command:

```
[cloudera@quickstart ~]$ hdfs dfs -cp /user/exercisel/decofcards.txt /user/exercisel/deckofcardsCopy.txt
```

The terminal output shows an error message:

```
cp: '/user/exercisel/decofcards.txt': No such file or directory
```

The user then enters the command:

```
[cloudera@quickstart ~]$ hdfs dfs -cp /user/exercisel/deckofcards.txt /user/exercisel/deckofcardsCopy.txt
```

The terminal output shows another error message:

```
cp: '/user/exercisel/deckofcards.txt': No such file or directory
```

The user then enters the command:

```
[cloudera@quickstart ~]$ hdfs dfs -ls /user/exercisel
```

The terminal output shows the following information:

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

The user then enters the command:

```
[cloudera@quickstart ~]$ hdfs dfs -ls /user/exercisel
```

The terminal output shows the following information:

```
Found 2 items
-rw-r--r-- 1 cloudera supergroup 693 2021-06-03 06:56 /user/exercisel/deckofcards.txt
-rw-r--r-- 1 cloudera supergroup 693 2021-06-03 07:10 /user/exercisel/deckofcardsCopy.txt
```

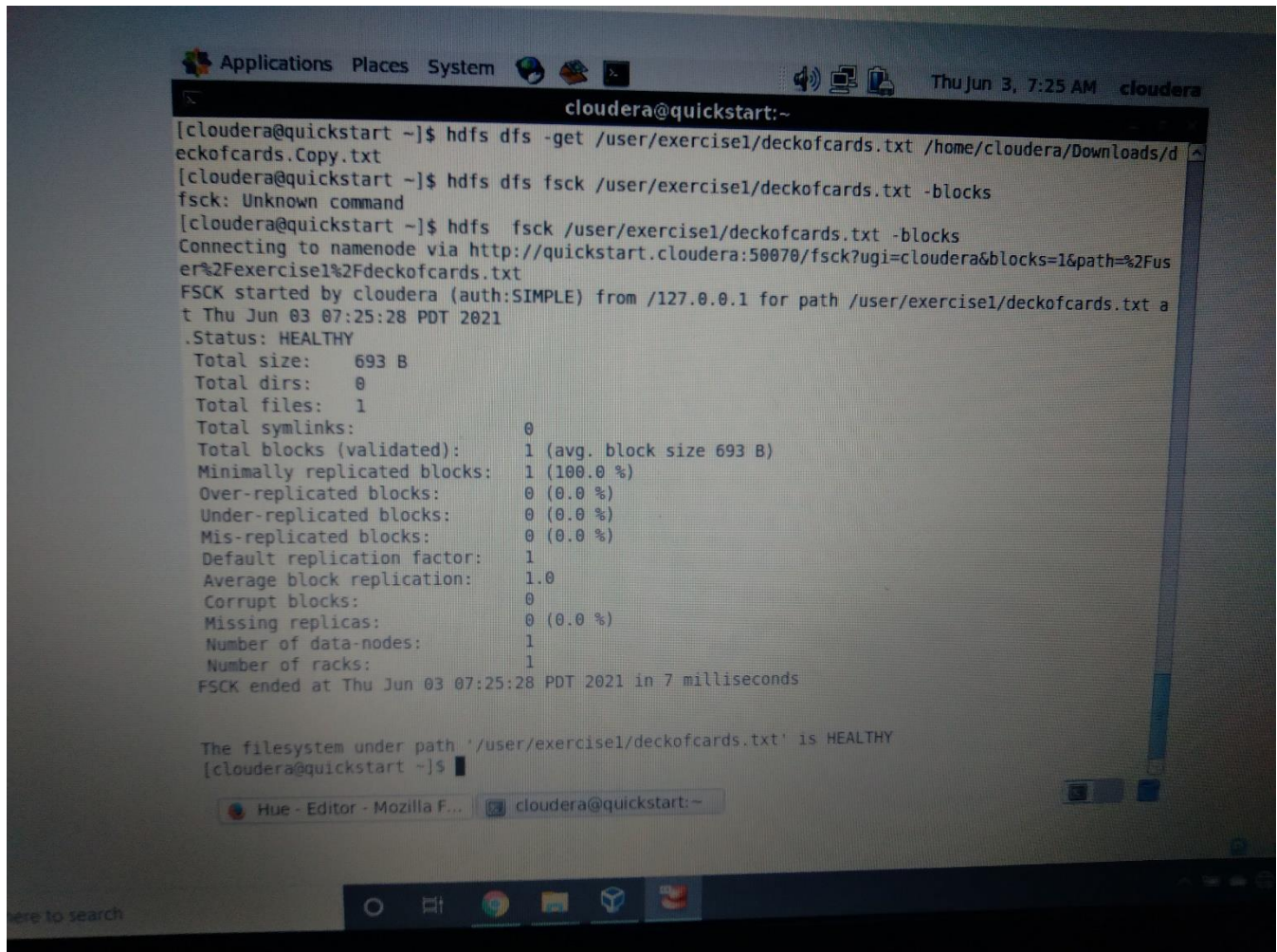
The user then enters the command:

```
[cloudera@quickstart ~]$
```

The terminal window is titled "cloudera@quickstart:~". The window has a menu bar with "File", "Input", "Devices", and "Help". The window has a toolbar with icons for "Applications", "Places", "System", and "cloudera@quickstart:~". The window has a status bar with "Thu Jun 3, 7:11 AM" and "cloudera".



Copy deckofcards.txt back to local file system and name it deckofcards.copy.txt and check using FSCK

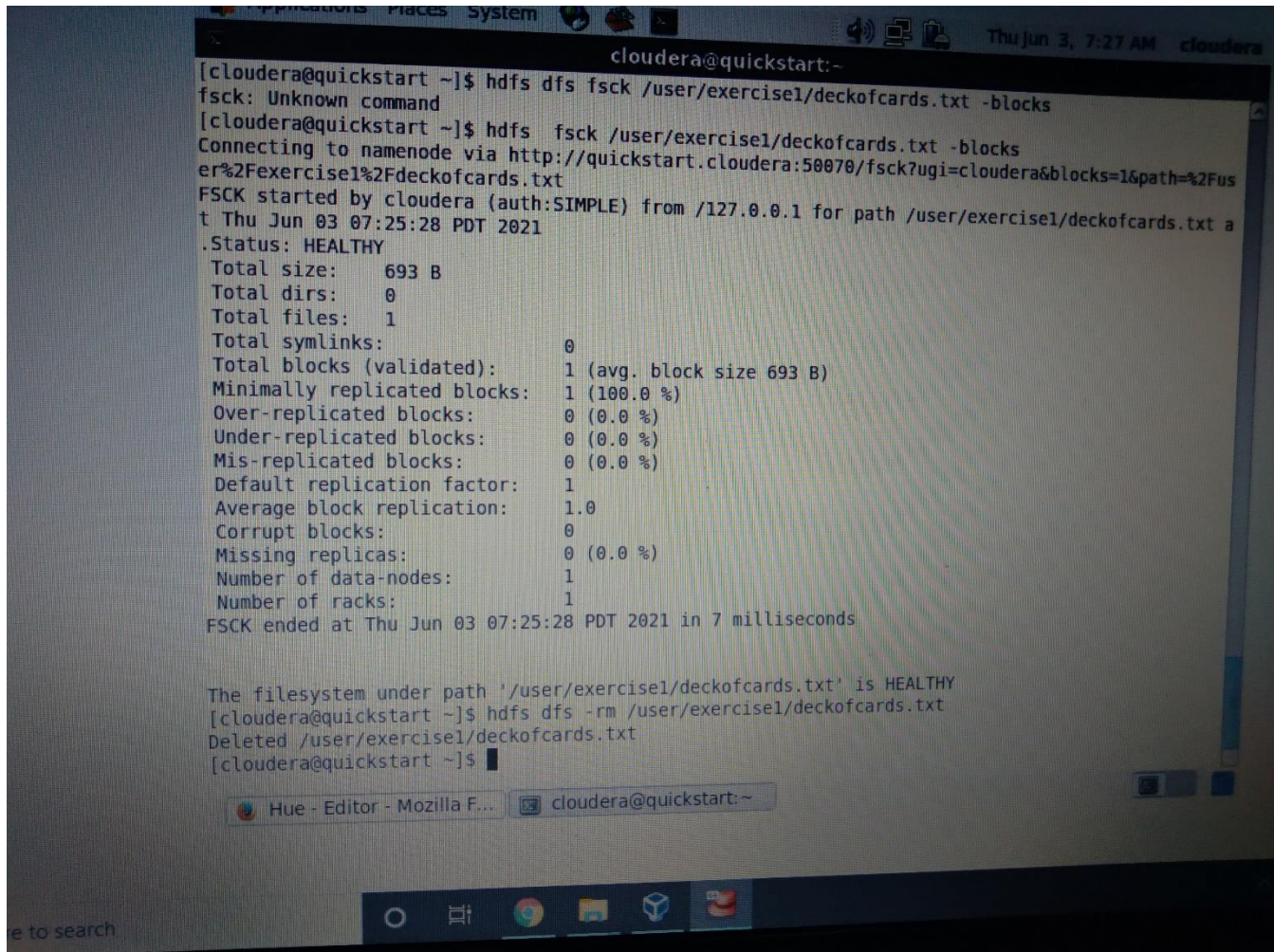


```
cloudera@quickstart:~$ hdfs dfs -get /user/exercisel/deckofcards.txt /home/cloudera/Downloads/deckofcards.Copy.txt
cloudera@quickstart:~$ hdfs dfs fsck /user/exercisel/deckofcards.txt -blocks
fsck: Unknown command
cloudera@quickstart:~$ hdfs fsck /user/exercisel/deckofcards.txt -blocks
Connecting to namenode via http://quickstart.cloudera:50070/fsck?ugi=cloudera&blocks=1&path=%2Fuser%2Fexercisel%2Fdeckofcards.txt
FSCK started by cloudera (auth:SIMPLE) from /127.0.0.1 for path /user/exercisel/deckofcards.txt at Thu Jun 03 07:25:28 PDT 2021
Status: HEALTHY
Total size:      693 B
Total dirs:      0
Total files:     1
Total symlinks:  0
Total blocks (validated): 1 (avg. block size 693 B)
Minimally replicated blocks: 1 (100.0 %)
Over-replicated blocks: 0 (0.0 %)
Under-replicated blocks: 0 (0.0 %)
Mis-replicated blocks: 0 (0.0 %)
Default replication factor: 1
Average block replication: 1.0
Corrupt blocks: 0
Missing replicas: 0 (0.0 %)
Number of data-nodes: 1
Number of racks: 1
FSCK ended at Thu Jun 03 07:25:28 PDT 2021 in 7 milliseconds

The filesystem under path '/user/exercisel/deckofcards.txt' is HEALTHY
cloudera@quickstart:~$
```



Delete deckofcards.txt from HDFS

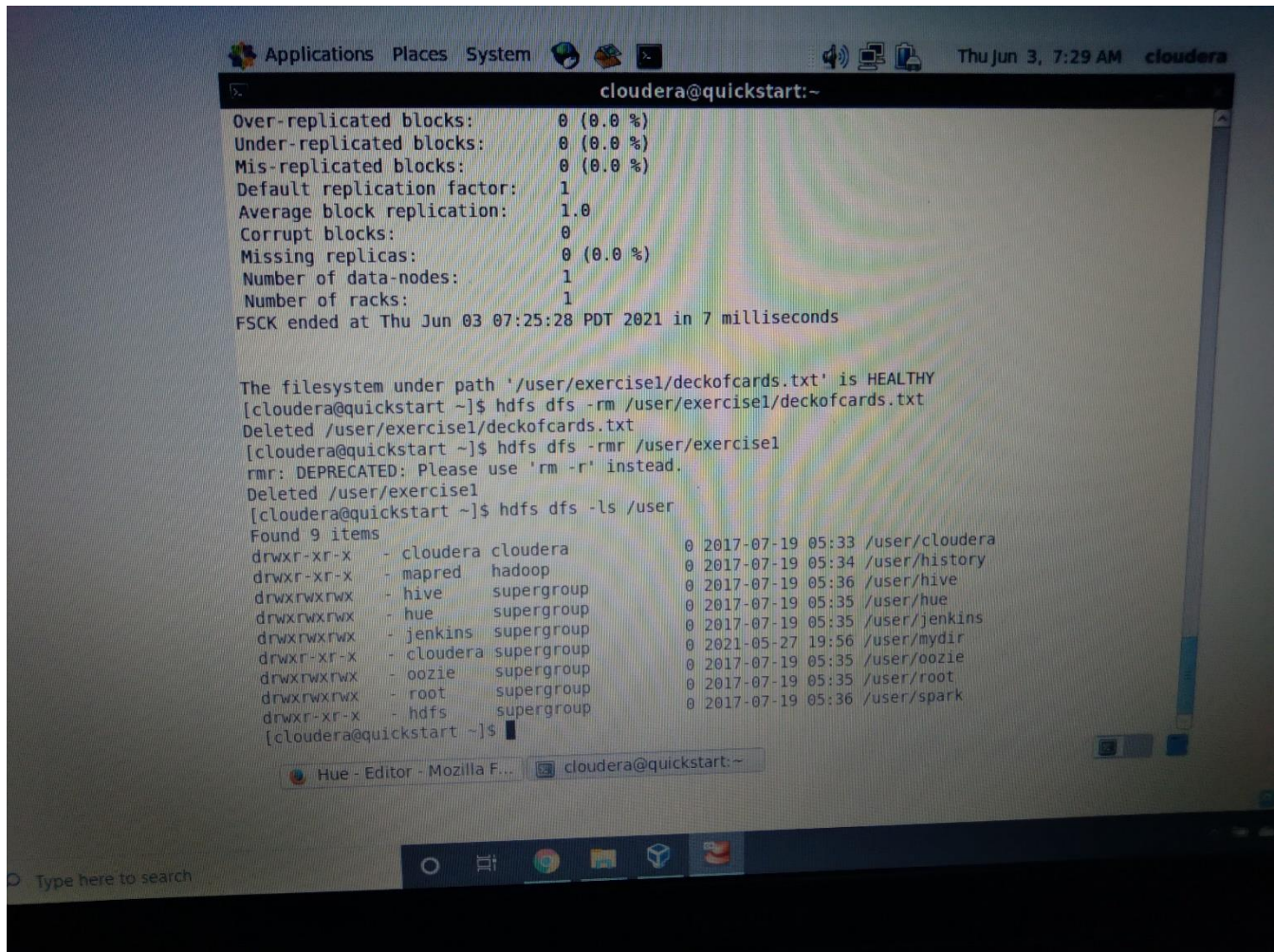


The screenshot shows a terminal window titled 'cloudera@quickstart:~'. The user enters the command `hdfs dfs fsck /user/exercisel/deckofcards.txt -blocks`. The output shows the file is healthy with a total size of 693 B and 1 block. The user then enters `hdfs dfs -rm /user/exercisel/deckofcards.txt`, and the output confirms the file has been deleted. The terminal window is part of a desktop environment with a taskbar at the bottom showing icons for Hue, Firefox, and other applications. The system clock in the top right corner indicates 'Thu Jun 3, 7:27 AM'.

```
cloudera@quickstart:~$ hdfs dfs fsck /user/exercisel/deckofcards.txt -blocks
fsck: Unknown command
cloudera@quickstart ~]$ hdfs fsck /user/exercisel/deckofcards.txt -blocks
Connecting to namenode via http://quickstart.cloudera:50070/fsck?ugi=cloudera&blocks=1&path=%2Fuser%2Fexercisel%2Fdeckofcards.txt
FSCK started by cloudera (auth:SIMPLE) from /127.0.0.1 for path /user/exercisel/deckofcards.txt at Thu Jun 03 07:25:28 PDT 2021
Status: HEALTHY
Total size:      693 B
Total dirs:      0
Total files:     1
Total symlinks:  0
Total blocks (validated): 1 (avg. block size 693 B)
Minimally replicated blocks: 1 (100.0 %)
Over-replicated blocks: 0 (0.0 %)
Under-replicated blocks: 0 (0.0 %)
Mis-replicated blocks: 0 (0.0 %)
Default replication factor: 1
Average block replication: 1.0
Corrupt blocks: 0
Missing replicas: 0 (0.0 %)
Number of data-nodes: 1
Number of racks: 1
FSCK ended at Thu Jun 03 07:25:28 PDT 2021 in 7 milliseconds

The filesystem under path '/user/exercisel/deckofcards.txt' is HEALTHY
cloudera@quickstart ~]$ hdfs dfs -rm /user/exercisel/deckofcards.txt
Deleted /user/exercisel/deckofcards.txt
cloudera@quickstart ~]$
```

## Remove Directory exercise1 form HDFS



```
Applications Places System Thu Jun 3, 7:29 AM cloudera
cloudera@quickstart:~
Over-replicated blocks: 0 (0.0 %)
Under-replicated blocks: 0 (0.0 %)
Mis-replicated blocks: 0 (0.0 %)
Default replication factor: 1
Average block replication: 1.0
Corrupt blocks: 0
Missing replicas: 0 (0.0 %)
Number of data-nodes: 1
Number of racks: 1
FSCK ended at Thu Jun 03 07:25:28 PDT 2021 in 7 milliseconds

The filesystem under path '/user/exercisel/deckofcards.txt' is HEALTHY
[cloudera@quickstart ~]$ hdfs dfs -rm /user/exercisel/deckofcards.txt
Deleted /user/exercisel/deckofcards.txt
[cloudera@quickstart ~]$ hdfs dfs -rmr /user/exercisel
rmr: DEPRECATED: Please use 'rm -r' instead.
Deleted /user/exercisel
[cloudera@quickstart ~]$ hdfs dfs -ls /user
Found 9 items
drwxr-xr-x - cloudera cloudera 0 2017-07-19 05:33 /user/cloudera
drwxr-xr-x - mapred hadoop 0 2017-07-19 05:34 /user/history
drwxrwxrwx - hive supergroup 0 2017-07-19 05:36 /user/hive
drwxrwxrwx - hue supergroup 0 2017-07-19 05:35 /user/hue
drwxrwxrwx - jenkins supergroup 0 2017-07-19 05:35 /user/jenkins
drwxr-xr-x - cloudera supergroup 0 2021-05-27 19:56 /user/mydir
drwxrwxrwx - oozie supergroup 0 2017-07-19 05:35 /user/oozie
drwxrwxrwx - root supergroup 0 2017-07-19 05:35 /user/root
drwxr-xr-x - hdfs supergroup 0 2017-07-19 05:36 /user/spark
[cloudera@quickstart ~]$
```

Hue - Editor - Mozilla F... cloudera@quickstart:~

Type here to search



