Assisted Practice 3: HDFS Commands

Problem Scenario: Write the commands to work with HDFS.

Objective: In this demonstration, you will explore the basic commands of HDFS.

Tasks to Perform:

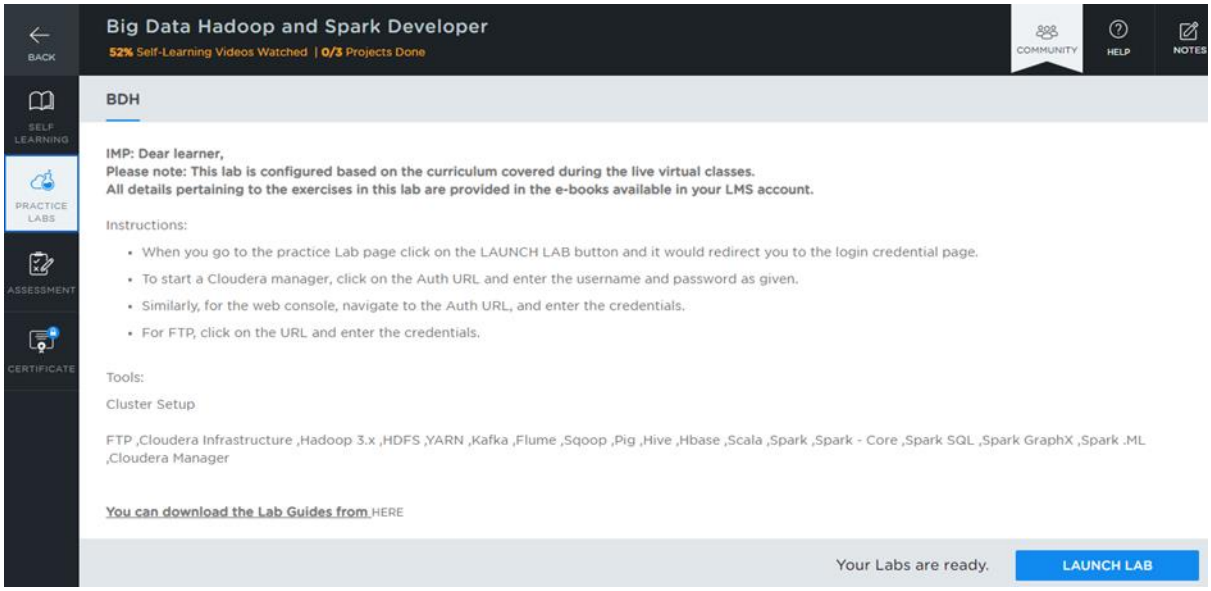
1. Create a text file named “Sample.txt” in the vi editor
2. Create a directory named “Simplilearn“ in HDFS
3. Transfer a sample text file from your local filesystem to the HDFS directory
4. Show the content of the HDFS file uploaded on the command prompt.
5. Get details of all the replicated blocks of the sample file uploaded
6. Remove the text file from the HDFS directory

Steps to Perform:

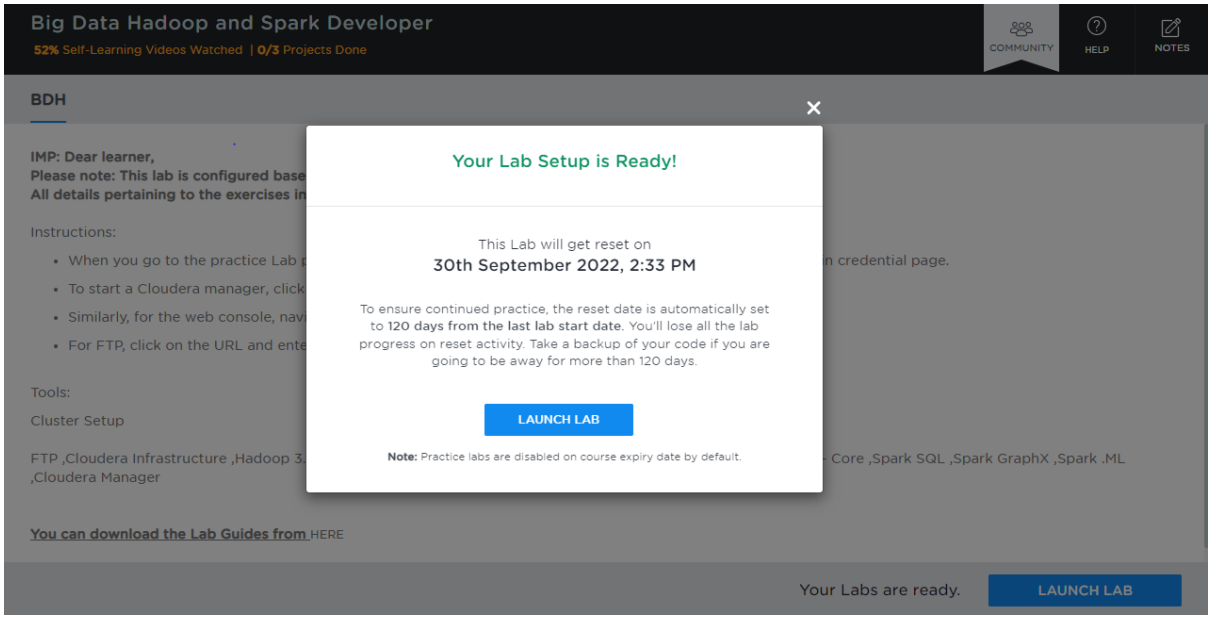
Step 1: Log in to your LMS account

Step 2: Open the course “**Big Data Hadoop and Spark Developer**”

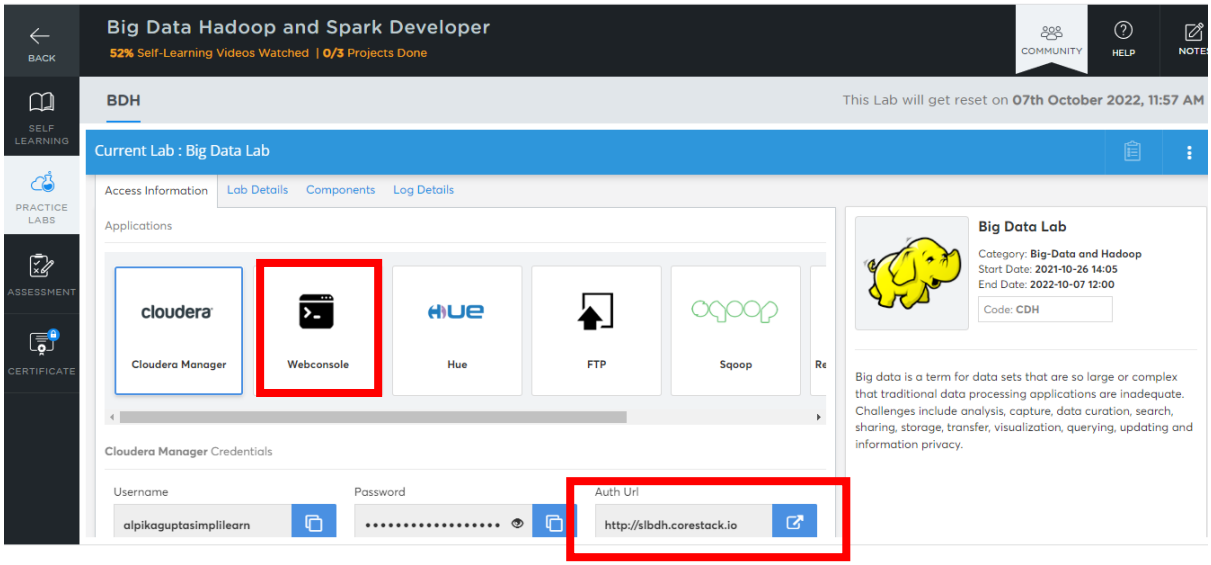
Step 3: On the left side, click on the “**PRACTICE LABS**” tab and click on the “**LAUNCH LAB**” button



Step 4: Again, click on the "**LAUNCH LAB**" button



Step 5: Click on "**Webconsole**" and click on the "**Auth Url**"



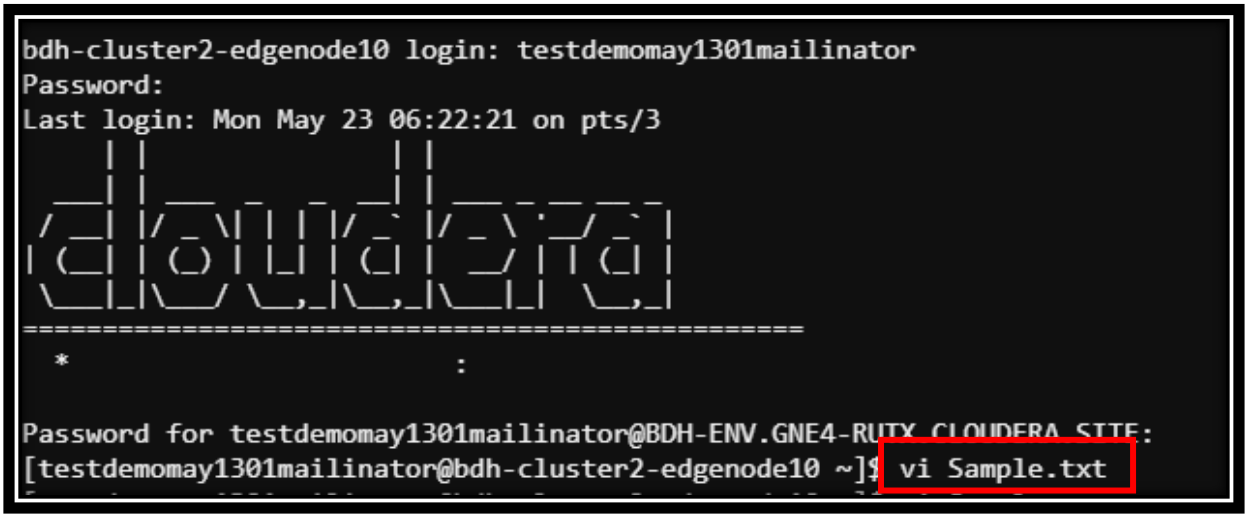
Step 6: Copy the "**Username**" and the "**Password**" provided to log in to the Web console

Step 7: Paste the "**Username**" and the "**Password**" on the console and click on enter

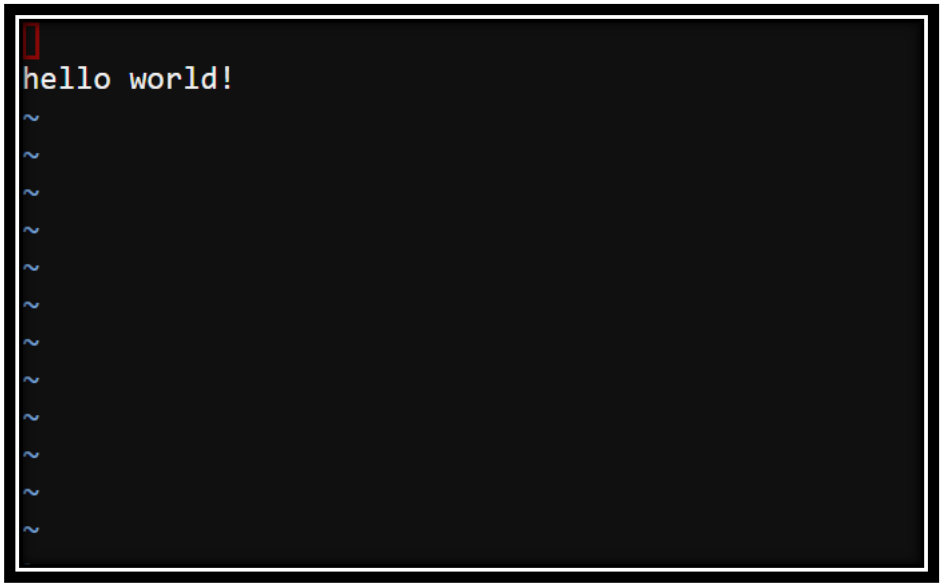
Note: The password will not be visible when pasted on the console

Step 8: Create a Sample.txt file using the vi editor using the below command

Command: vi Sample.txt



Step 9: Add some text inside the Sample.txt file after the below screen appears:



Step 10: To come out of the vi editor, click on esc:wq

Step 11: Create a directory named **"Simplilearn"** on HDFS using the below command:

Command:

hdfs dfs -mkdir Simplilearn

Step 12: Copy the Sample.txt file from the local system to the HDFS Simplilearn directory using the below command:

Command:

hdfs dfs -put Sample.txt Simplilearn/

```
[testdemomay1301mailinator@bdh-cluster2-edgenode10 ~]$ hdfs dfs -put Sample.txt Simplilearn/
```

Step 13: Using the command prompt, display the contents of the Sample.txt file that was uploaded to the HDFS

Command:

hdfs dfs -cat Simplilearn/Sample.txt

```
[testdemomay1301mailinator@bdh-cluster2-edgenode10 ~]$ hdfs dfs -cat Simplilearn/Sample.txt
hello world
```

Step 14: Get details of all the replicated blocks of the Sample.txt file uploaded on the HDFS

Command:

hdfs fsck Simplilearn/Sample.txt -files -locations -blocks

```
[testdemomay1301mailinator@bdh-cluster2-edgenode10 ~]$ hdfs fsck Simplilearn/Sample.txt -files -locations -blocks
Connecting to namenode via https://bdh-cluster2-master10.bdh-env.gne4-rutx.cloudera.site:9871/fsck?ugi=testdemomay1301
%2Fuser%2Ftestdemomay1301mailinator%2FSimplilearn%2FSample.txt
FSCK started by testdemomay1301mailinator (auth:KERBEROS_SSL) from /10.0.2.134 for path /user/testdemomay1301mailinato
59 UTC 2022

/user/testdemomay1301mailinator/Simplilearn/Sample.txt 12 bytes, replicated: replication=2, 1 block(s):  OK
0. BP-1117704909-10.0.2.99-1646027839873:blk_1073859012_118214 len=12 Live_repl=2  [DatanodeInfoWithStorage[10.0.2.182
,DISK], DatanodeInfoWithStorage[10.0.2.120:1004,DS-41ea42fc-a235-4944-a435-7727565aee41,DISK]]


Status: HEALTHY
 Number of data-nodes:  3
 Number of racks:               1
 Total dirs:                    0
 Total symlinks:                0
```

Step 15: Remove the Sample.txt file from the HDFS directory

Command:

hdfs dfs -rm -r Simplilearn/Sample.txt