

PRACTICAL = 2

#. Installation of HDP Sandbox and import in the VM box to visualize what's going on in the Hadoop.

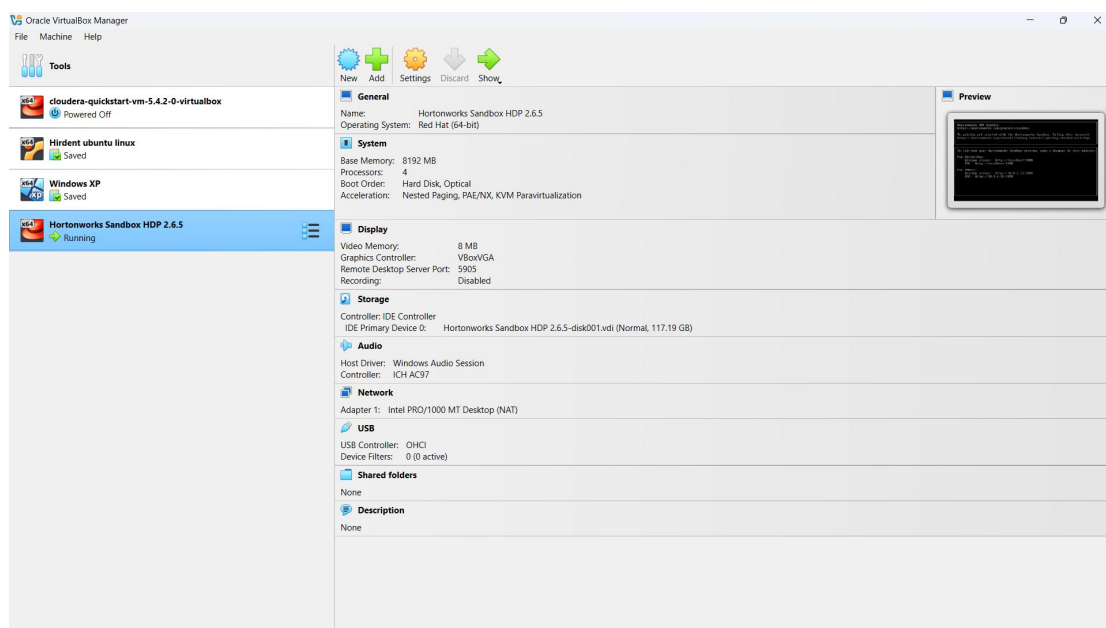
Step 1: Download the VM box from the browser :

Link :<https://www.virtualbox.org/wiki/Downloads>

Step 2:Download the HDP Sandbox file:

Link:<https://www.cloudera.com>

Step 3:Import the file in the VM box.



Step 4: Run the HDP Sandbox in the VM box.

```
Hortonworks HDP Sandbox  
https://hortonworks.com/products/sandbox
```

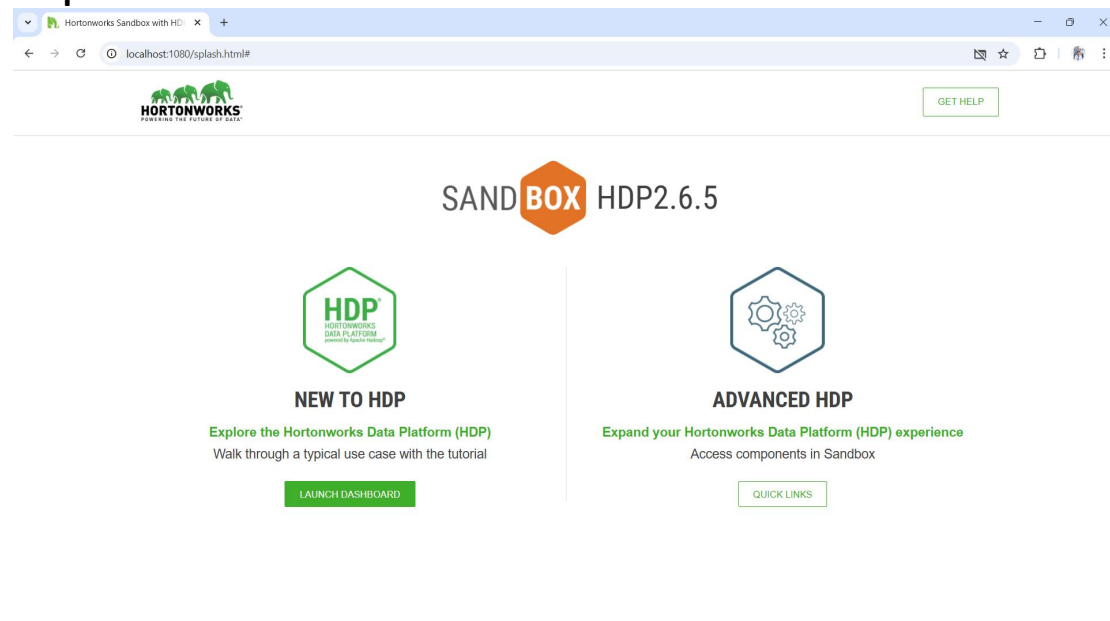
```
To quickly get started with the Hortonworks Sandbox, follow this tutorial:  
https://hortonworks.com/tutorial/hadoop-tutorial-getting-started-with-hdp/
```

To initiate your Hortonworks Sandbox session, open a browser to this address:

For VirtualBox:
Welcome screen: <http://localhost:1080>
SSH: <http://localhost:4200>

For VMWare:
Welcome screen: <http://10.0.2.15:1080>
SSH: <http://10.0.2.15:4200>


Step 5: Run the link in the browser.




The screenshot shows a web browser window with the address bar displaying 'localhost:1080/splash.html#'. The page features the Hortonworks logo at the top left and a 'GET HELP' button at the top right. The main heading is 'SAND BOX HDP2.6.5'. Below this, there are two columns of content. The left column is titled 'NEW TO HDP' and includes the text 'Explore the Hortonworks Data Platform (HDP)' and 'Walk through a typical use case with the tutorial', with a green 'LAUNCH DASHBOARD' button below. The right column is titled 'ADVANCED HDP' and includes the text 'Expand your Hortonworks Data Platform (HDP) experience' and 'Access components in Sandbox', with a green 'QUICK LINKS' button below.


Hortonworks Sandbox with HDP x +

localhost:1080/splash.html#

 GET HELP

SAND BOX HDP2.6.5


NEW TO HDP
Explore the Hortonworks Data Platform (HDP)
Walk through a typical use case with the tutorial
LAUNCH DASHBOARD


ADVANCED HDP
Expand your Hortonworks Data Platform (HDP) experience
Access components in Sandbox
QUICK LINKS

Step 6: Login in the Ambari Sandbox.

Ambari - Google Chrome
localhost:8080/#/login

Ambari

Sign in

Username
maria_dev

Password

Sign in

Licensed under the Apache License, Version 2.0.
See third-party tools/resources that Ambari uses and their respective authors

Ambari - Sandbox - Google Chrome
localhost:8080/#/main/dashboard/metrics

Ambari Sandbox 1 op 17 alerts Dashboard Services Hosts Alerts Admin maria_dev

- HDFS
- YARN
- MapReduce2
- Tez
- Hive
- HBase
- Pig
- Sqoop
- Oozie
- ZooKeeper
- Falcon
- Storm
- Flume
- Ambari Infra
- Atlas
- Kafka
- Knox
- Ranger
- Spark2
- Zeppelin
- Notebook
- Druid
- Slider
- Superset

Metrics Heatmaps Config History

Metric Actions Last 1 hour

HDFS Disk Usage n/a	DataNodes Live n/a	HDFS Links NameNode Secondary NameNode 1 DataNodes More	Memory Usage No Data Available	Network Usage No Data Available
CPU Usage No Data Available	Cluster Load No Data Available	NameNode Heap n/a	NameNode RPC n/a	NameNode CPU WIO n/a
NameNode Uptime n/a	HBase Master Heap n/a	HBase Links No Active Master 1 RegionServers n/a More	HBase Ave Load n/a	HBase Master Uptime n/a
ResourceManager Heap n/a	ResourceManager Uptime n/a	YARN Memory n/a	NodeManagers Live n/a	YARN Links ResourceManager 1 NodeManagers More

Step 7:Download any two Datasets file.

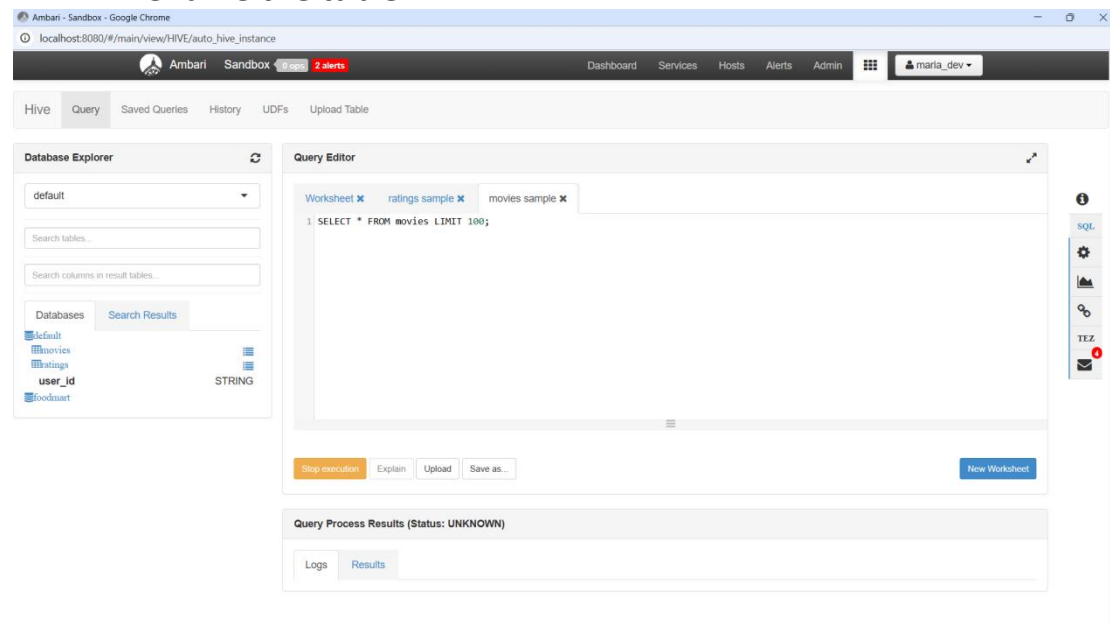
Step 8:Upload the files in the Ambari Sandbox.We will import the data from the local file there to import data open the hive view

After hive view click on the upload table option

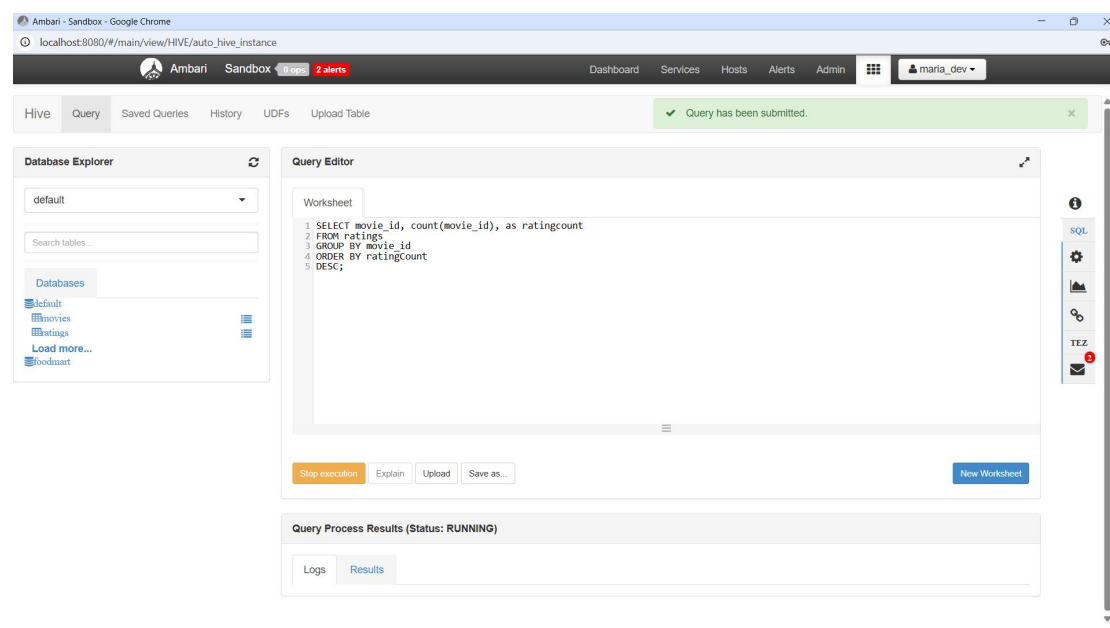
Select the csv file type & set the file delimiter type to the 9 (i.e horixontal tab)

Choose the file from your local system)(i.e u.data file)

Rename the table



Step 8:.)Write the SQL Query to perform operations.



Ambari - Sandbox - Google Chrome
localhost:8080/#/main/view/HIVE/auto_hive_instance

Query Process Results (Status: SUCCEEDED) Save results...

Logs Results

Filter columns...

previous next

movies.movie_id	movies.movie_name	movies.column3	movies.column4	movies.column5
1	Toy Story (1995)	01-Jan-1995	""	http://us.imdb.com/M/title-exact?Toy%20Story%20(1995)
2	GoldenEye (1995)	01-Jan-1995	""	http://us.imdb.com/M/title-exact?GoldenEye%20(1995)
3	Four Rooms (1995)	01-Jan-1995	""	http://us.imdb.com/M/title-exact?Four%20Rooms%20(1995)
4	Get Shorty (1995)	01-Jan-1995	""	http://us.imdb.com/M/title-exact?Get%20Shorty%20(1995)
5	Copycat (1995)	01-Jan-1995	""	http://us.imdb.com/M/title-exact?Copycat%20(1995)
6	Shanghai Triad (Yao a yao dao walpo qiao) (1995)	01-Jan-1995	""	http://us.imdb.com/T/ite?Yao+a+yao+dao+walpo+qiao+(1995)
7	Twelve Monkeys (1995)	01-Jan-1995	""	http://us.imdb.com/M/title-exact?Twelve%20Monkeys%20(1995)
8	Babe (1995)	01-Jan-1995	""	http://us.imdb.com/M/title-exact?Babe%20(1995)
9	Dead Man Walking (1995)	01-Jan-1995	""	http://us.imdb.com/M/title-exact?Dead%20Man%20Walking%20(1995)
10	Richard III (1995)	22-Jan-1996	""	http://us.imdb.com/M/title-exact?Richard%20III%20(1995)
11	Seven (Se7en) (1995)	01-Jan-1995	""	http://us.imdb.com/M/title-exact?Se7en%20(1995)
12	Usual Suspects, The (1995)	14-Aug-1995	""	http://us.imdb.com/M/title-exact?Usual%20Suspects,%20The%20(1995)
13	Mighty Aphrodite (1995)	30-Oct-1995	""	http://us.imdb.com/M/title-exact?Mighty%20Aphrodite%20(1995)

Query Process Results		
Logs	Results	
Filter columns...		
movies.movie_id		m
1		To
2		G
3		F
4		G
5		C
6		S a q
7		T (1
8		B
9		D (1
10		R
11		S (1
12		U (1