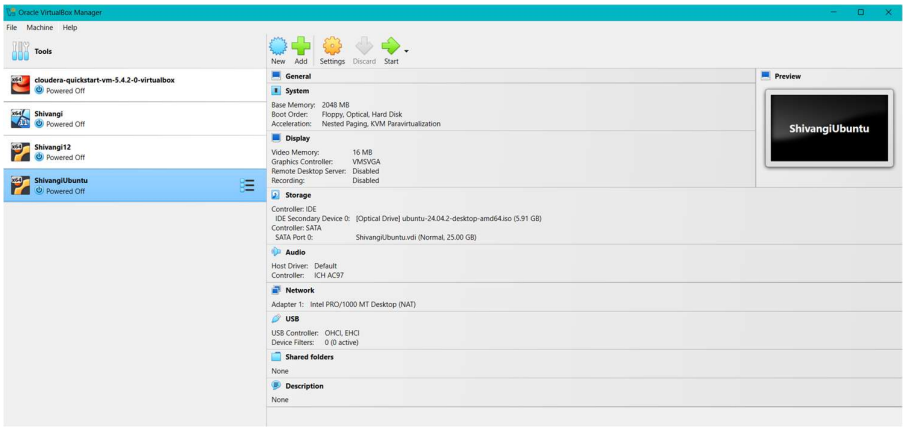
Practical – 2

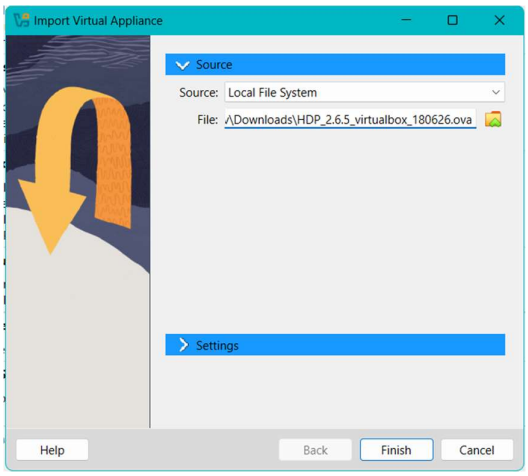
Steps to install Hadoop

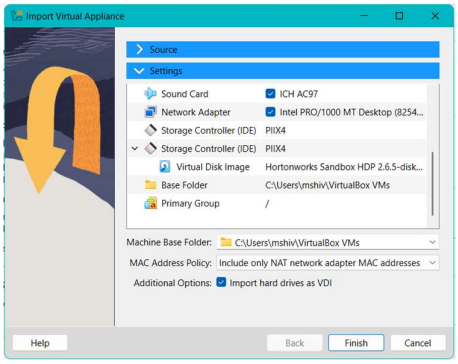
Step 1) From the browser download the Virtual box
link-https://www.virtualbox.org/wiki/Downloads
Download the software for the windows hosts



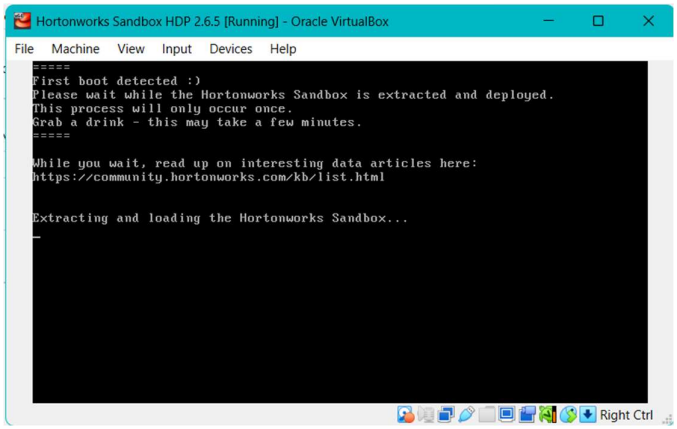
Step 2) Install the HDP Sandbox
visit the cloudera platform & search for the hdp sandbox
Link-https://www.cloudera.com/
As per new updation since from 2023 the version have been changed so you may get your sandbox through the link provided link below
link for hdp sandbox-https://archive.cloudera.com/hwx-sandbox/hdp/hdp-2.6.5/HDP_2.6.5_virtualbox_180626.ova

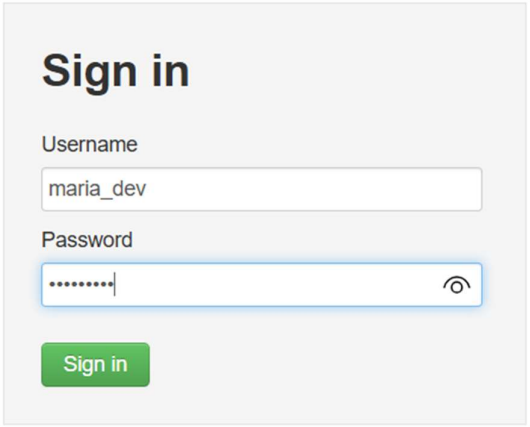
Step 3) Import the sandbox in virtual box
After downloading click on import button on the virtual box and import the file
Hit the start button



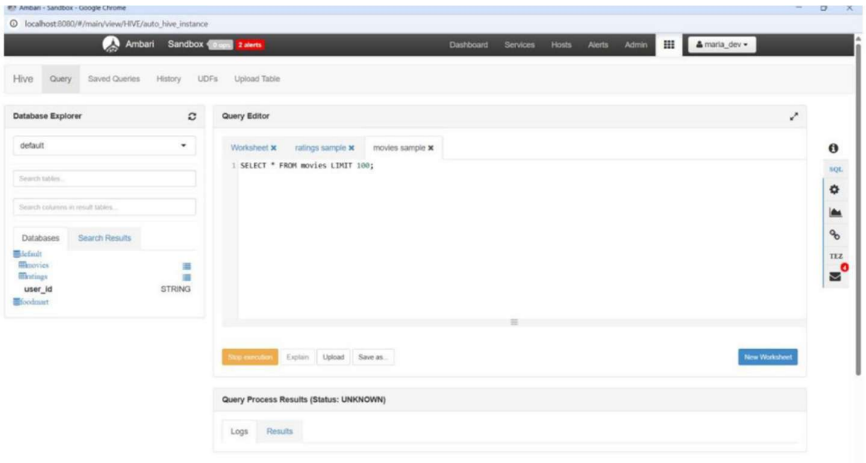


Step 4) To visualize what's going on in the Hadoop we may visualize through Ambari
Go & visit on the address provided on the virtual box
Click on the address & launch the dashboard
It requires the username & password
Username – maria_dev
Password- maria_dev





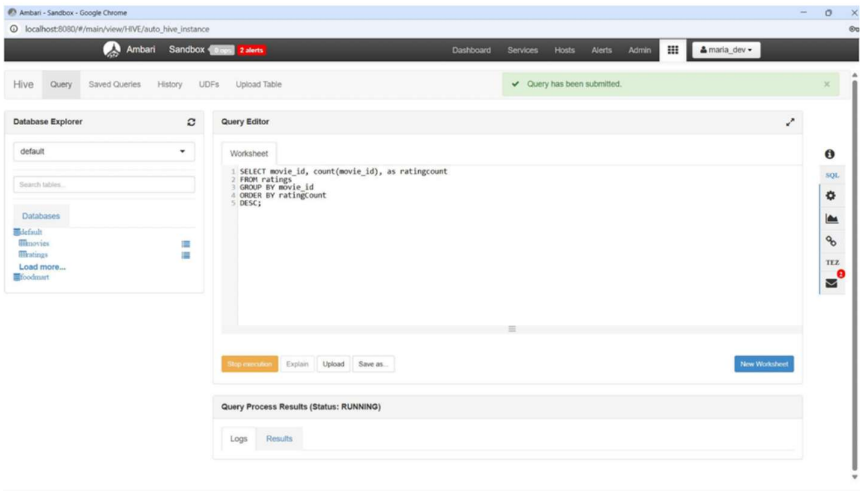
Step 5) Small Activity
Download the dataset from grouplens
link-https://grouplens.org/datasets/movielens/
older dataset is provided on the website
Hit the download button & download ml.100k.zip file
Once you have downloaded extract the data



Step 6) Working on the downloaded dataset
Go into the ambari tool and from the menu go into the hive view
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 name-ratings
column name-
user_id
movie_id
rating
rating_time
Hit the upload button
Same for the movie name table
Select the file type as above and set the file delimiter to 124

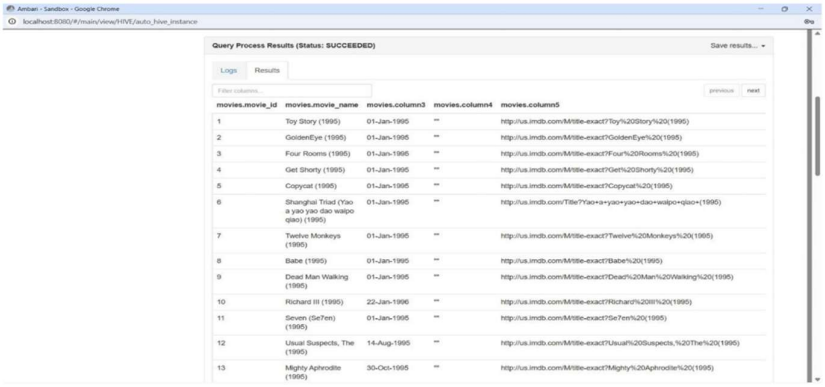
Rename the table name to movie_name
column name-

Movie_id
name
After this hit the upload button



Step 7)Write the SQL Query to perform operations
SQL Query1-
SELECT movie_id, count(movie_id), as ratingcount
FROM ratings
GROUP BY movie_id
ORDER BY ratingCount
DESC
After writing the query execute it and see the results
SQL Query2-

SELECT name
FROM movie_names
WHERE novie_id=50
After writing the query execute it and see the results



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 yao dao waipo qiao) (1995)	01-Jan-1995	""	http://us.imdb.com/Title?Yao+a+yao+yao+dao+waipo+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)