

EX-6 Create tables in Hive and write queries to access the data in the table

AIM:

To create tables in Hive and write queries to access the data in the table.

PROCEDURE:

Installation of Hive:

1. Installing Apache Derby

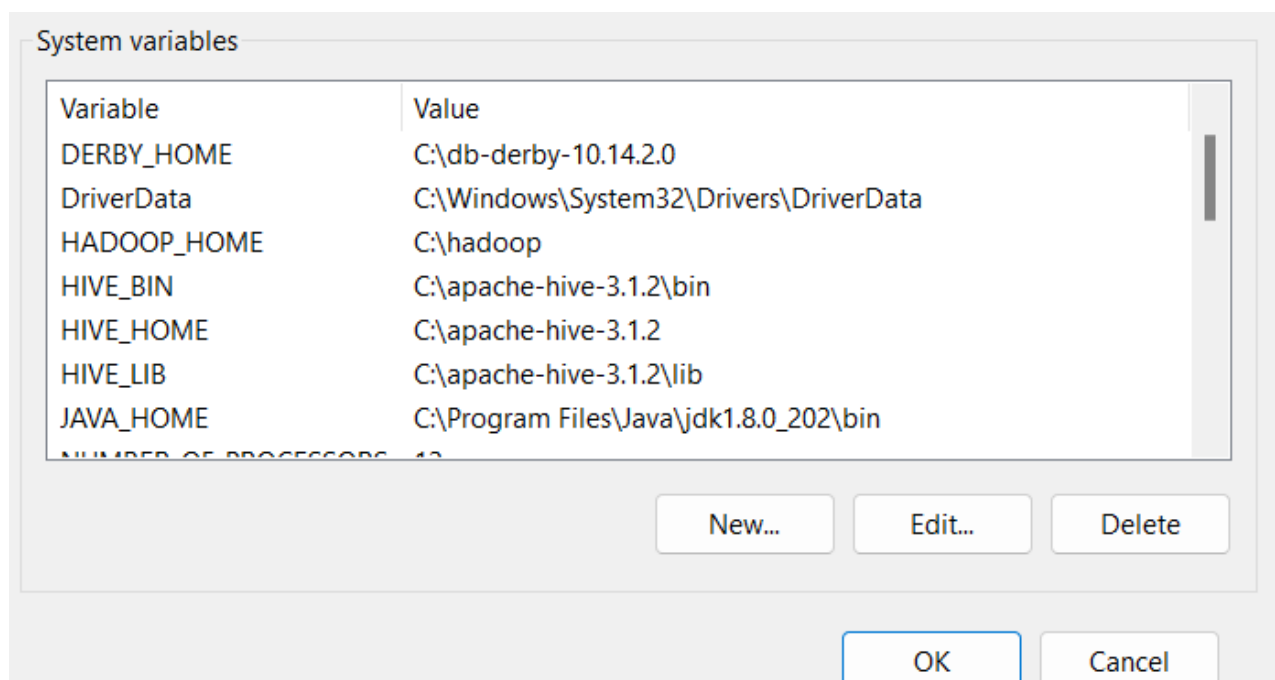
Install Apache Derby 10.14.2.0

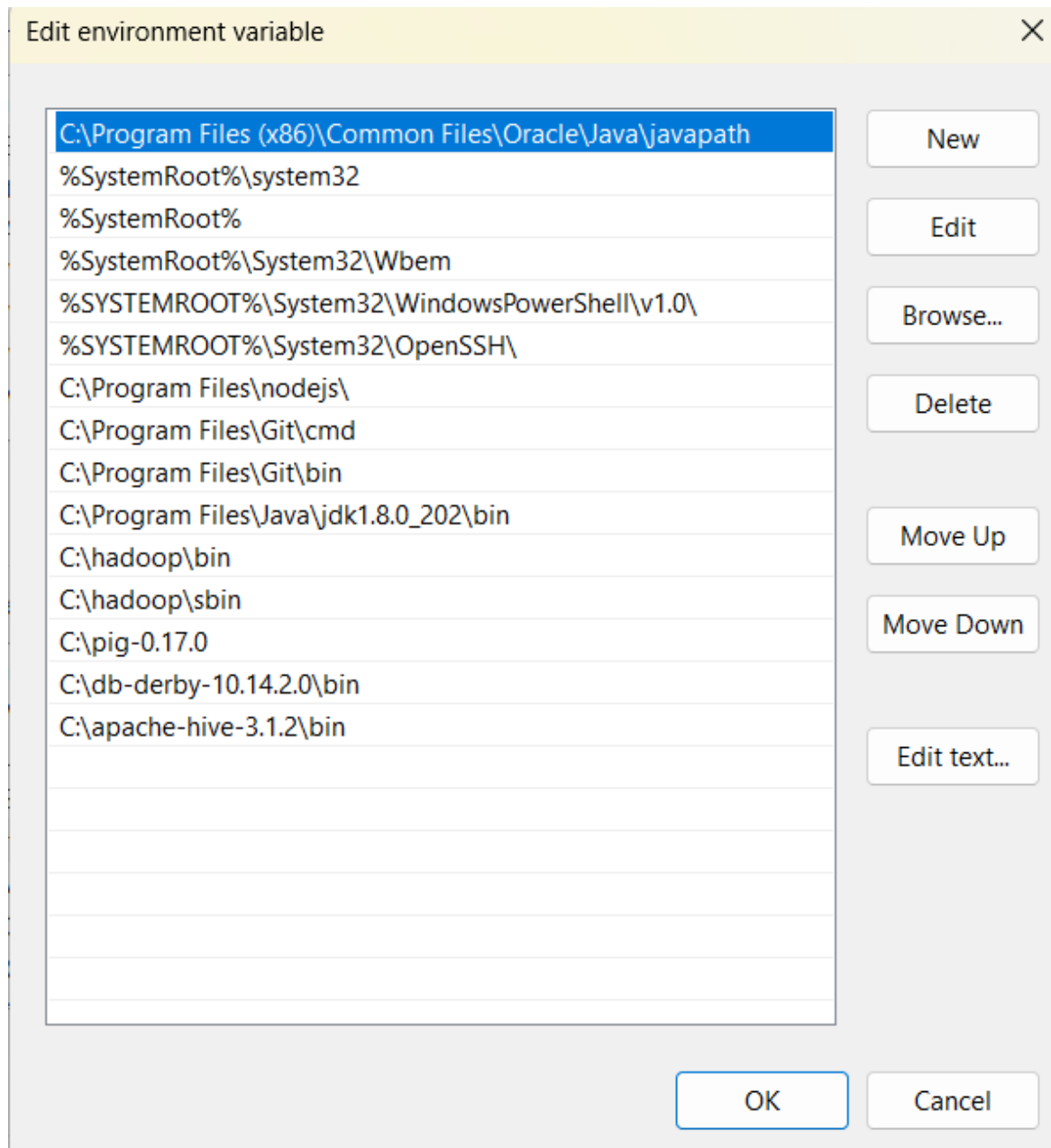
https://db.apache.org/derby/derby_downloads.html#For+Java+8+and+Higher

2. Downloading Apache Hive binaries

<https://downloads.apache.org/hive/hive-3.1.2/>

3. Setting environment variables





3.1. Copy Derby libraries

we should go to the Derby libraries directory (db-derby-10.14.2.0\lib) and copy all *.jar files. Then, we should paste them within the Hive libraries directory.

3.2. Configuring hive-site.xml and Hive's Bin folder

Refer following link to download the file. Also download the guava file. Put hive-site.xml file to hive's conf location and replace hive's current guava file with this one in lib location. Also download the bin folder from link and replace the existing hive's bin folder.

<https://1drv.ms/f/s!ArSg3Xpur4Grmw0SDqW0g44T7HYU?e=wDsoBn>

4. Starting Hadoop Services

```
start-all.cmd
```

5. Derby Network Server: Run the following command in separate window to open Derby

```
StartNetworkServer -h 0.0.0.0
```

6. Starting Apache Hive

Go to Apache Hive's bin location with cd command and run the following command:

```
hive --service schematool -dbType derby -initSchema
```

7. Open Hive shell by typing:

```
hive
```

Create a Database:

Start by creating a database. Open the Hive CLI and follow the steps below:

1. Use the **CREATE DATABASE** statement to create a new database:

```
CREATE DATABASE sample;
```

2. Verify the database is present:

```
SHOW DATABASES;
```

3. Switch to the new database:

```
USE sample;
```

Create a Table in Hive

```
CREATE TABLE students (name STRING, roll INT, dept STRING);
```

Add Data

Run the **LOAD DATA LOCAL INPATH** command:

```
LOAD DATA INPATH  
'C:/Users/hp/users/Documents/DataAnalytics/Hive/students.csv' WRITE INTO TABLE  
students;
```

List Hive Tables and Data

To show all tables in a selected database, use the following statement:

```
SHOW TABLES;
```

To show table column names and data types, run:

```
DESC students;
```

To display table data, use a **SELECT** statement. For example, to select everything in a table, run:

```
SELECT * FROM students;
```

OUTPUT:

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.22631.3880]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>cd /

C:\>start-all.cmd
This script is deprecated. Instead use start-dfs.cmd and start-yarn.cmd
starting yarn daemons

C:\>hive --service schematool -dbType derby -initSchema
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/C:/hadoop/share/hadoop/common/lib/slf4j-reload4j-1.7.36.jar/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/C:/apache-hive-3.1.2/lib/log4j-slf4j-impl-2.10.0.jar/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.slf4j.impl.Reload4jLoggerFactory]
2024-09-01 17:40:58,455 INFO conf.HiveConf: Found configuration file null
2024-09-01 17:40:59,429 INFO tools.HiveSchemaHelper: Metastore connection URL: jdbc:derby;databaseName=metastore_db;create=true
Metastore connection URL: jdbc:derby;databaseName=metastore_db;create=true
2024-09-01 17:40:59,430 INFO tools.HiveSchemaHelper: Metastore Connection Driver : org.apache.derby.jdbc.EmbeddedDriver
Metastore Connection Driver : org.apache.derby.jdbc.EmbeddedDriver
2024-09-01 17:40:59,431 INFO tools.HiveSchemaHelper: Metastore connection User: APP
Metastore connection User: APP
Starting metastore schema initialization to 3.1.0
Initialization script hive-schema-3.1.0.derby.sql

Error: FUNCTION 'NUCLEUS.ASCII' already exists. (state=X0Y68,code=30000)
org.apache.hadoop.hive.metastore.HiveMetaException: Schema initialization FAILED! Metastore state would be inconsistent !!
Underlying cause: java.io.IOException: Schema script failed, errorcode 2
Use --verbose for detailed stacktrace.
*** schemaTool failed ***

C:\>jps
11156 Jps
11732 NodeManager
18776 NetworkServerControl
8654 DataNode
14428 ResourceManager
4588 NameNode

C:\>hive --service schematool -dbType derby -initSchema
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/C:/hadoop/share/hadoop/common/lib/slf4j-reload4j-1.7.36.jar/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/C:/apache-hive-3.1.2/lib/log4j-slf4j-impl-2.10.0.jar/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.slf4j.impl.Reload4jLoggerFactory]
2024-09-01 17:41:39,443 INFO conf.HiveConf: Found configuration file null
2024-09-01 17:41:40,645 INFO tools.HiveSchemaHelper: Metastore connection URL: jdbc:derby;databaseName=metastore_db;create=true
```

```
Administrator: Command Prompt
C:\>hive
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/C:/hadoop/share/hadoop/common/lib/slf4j-reload4j-1.7.36.jar/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/C:/apache-hive-3.1.2/lib/log4j-slf4j-impl-2.10.0.jar/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.slf4j.impl.Reload4jLoggerFactory]
2024-09-01 17:41:58,424 INFO conf.HiveConf: Found configuration file null
2024-09-01 17:42:02,348 WARN conf.LogUtils: hive-site.xml not found on CLASSPATH
Hive Session ID = 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:42:02,417 INFO SessionState: Hive Session ID = 564344f2-2334-4234-912b-8dca3022f491

Logging initialized using configuration in jar:file:/C:/apache-hive-3.1.2/lib/hive-common-3.1.2.jar/hive-log4j2.properties Async: true
2024-09-01 17:42:02,574 INFO SessionState:
Logging initialized using configuration in jar:file:/C:/apache-hive-3.1.2/lib/hive-common-3.1.2.jar/hive-log4j2.properties Async: true
2024-09-01 17:42:04,575 INFO session.SessionState: Created HDFS directory: /tmp/hive/hp/564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:42:04,584 INFO session.SessionState: Created local directory: C:/Users/hp/AppData/Local/Temp/hp/564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:42:04,593 INFO session.SessionState: Created HDFS directory: /tmp/hive/hp/564344f2-2334-4234-912b-8dca3022f491/tmp_space.db
2024-09-01 17:42:04,623 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:42:06,996 INFO session.SessionState: Opening raw store with implementation class:org.apache.hadoop.hive.metastore.ObjectStore
2024-09-01 17:42:07,066 WARN metastore.ObjectStore: datanucleus.autoStartMechanismMode is set to unsupported value null - Setting it to value: ignored
2024-09-01 17:42:07,084 INFO metastore.ObjectStore: ObjectStore, initialize called
2024-09-01 17:42:07,090 INFO conf.MetastoreConf: Unable to find config file hive-site.xml
2024-09-01 17:42:07,090 INFO conf.MetastoreConf: Found configuration file null
2024-09-01 17:42:07,096 INFO conf.MetastoreConf: Unable to find config file hive-metastore-site.xml
2024-09-01 17:42:07,096 INFO conf.MetastoreConf: Found configuration file null
2024-09-01 17:42:07,105 INFO conf.MetastoreConf: Unable to find config file metastore-site.xml
2024-09-01 17:42:07,106 INFO conf.MetastoreConf: Found configuration file null
2024-09-01 17:42:07,541 INFO DataNucleus.Persistence: Property datanucleus.cache.level2 unknown - will be ignored
2024-09-01 17:42:09,528 INFO hikari.HikariDataSource: HikariPool-1 - Starting...
2024-09-01 17:42:09,539 WARN util.DriverDataSource: Registered driver with driverClassName=org.apache.derby.jdbc.EmbeddedDriver was not found, trying direct instantiation.
2024-09-01 17:42:09,139 INFO pool.PoolBase: HikariPool-1 - Driver does not support get/set network timeout for connections. (Feature not implemented: No details.)
2024-09-01 17:42:09,147 INFO hikari.HikariDataSource: HikariPool-1 - Start completed.
2024-09-01 17:42:09,349 INFO hikari.HikariDataSource: HikariPool-2 - Starting...
2024-09-01 17:42:09,350 WARN util.DriverDataSource: Registered driver with driverClassName=org.apache.derby.jdbc.EmbeddedDriver was not found, trying direct instantiation.
2024-09-01 17:42:09,357 INFO pool.PoolBase: HikariPool-2 - Driver does not support get/set network timeout for connections. (Feature not implemented: No details.)
2024-09-01 17:42:09,359 INFO hikari.HikariDataSource: HikariPool-2 - Start completed.
2024-09-01 17:42:10,166 INFO metastore.ObjectStore: Setting Metastore object pin classes with hive.metastore.cache.pinobjtypes=Table,StorageDescriptor,SerdeInfo,Partition,Database,Type,FieldSchema,Order"
2024-09-01 17:42:10,626 INFO metastore.MetastoreDirectSql: Using direct SQL, underlying DB is DERBY
2024-09-01 17:42:10,628 INFO metastore.ObjectStore: Initialized ObjectStore
2024-09-01 17:42:11,111 WARN DataNucleus.Metadata: Metadata has jdbc-type of null yet this is not valid. Ignored
2024-09-01 17:42:11,112 WARN DataNucleus.Metadata: Metadata has jdbc-type of null yet this is not valid. Ignored
2024-09-01 17:42:11,115 WARN DataNucleus.Metadata: Metadata has jdbc-type of null yet this is not valid. Ignored
2024-09-01 17:42:11,117 WARN DataNucleus.Metadata: Metadata has jdbc-type of null yet this is not valid. Ignored
2024-09-01 17:42:11,120 WARN DataNucleus.Metadata: Metadata has jdbc-type of null yet this is not valid. Ignored
2024-09-01 17:42:11,122 WARN DataNucleus.Metadata: Metadata has jdbc-type of null yet this is not valid. Ignored
2024-09-01 17:42:14,759 WARN DataNucleus.Metadata: Metadata has jdbc-type of null yet this is not valid. Ignored
2024-09-01 17:42:14,761 WARN DataNucleus.Metadata: Metadata has jdbc-type of null yet this is not valid. Ignored
```

```
hive> CREATE DATABASE financials;
2024-09-01 17:44:48,451 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:44:48,453 INFO session.SessionState: Updating thread name to 564344f2-2334-4234-912b-8dca3022f491 main
2024-09-01 17:44:48,457 INFO ql.Driver: Compiling command(queryId=hp_20240901174448_bbc124ae-2ccd-43b0-9f7b-6348b3077387): CREATE DATABASE financials
2024-09-01 17:44:48,623 INFO ql.Driver: Concurrent mode is disabled, not creating a lock manager
2024-09-01 17:44:48,683 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-01 17:44:48,699 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:null, properties:null)
2024-09-01 17:44:48,724 INFO ql.Driver: Completed compiling command(queryId=hp_20240901174448_bbc124ae-2ccd-43b0-9f7b-6348b3077387); Time taken: 0.267 seconds
2024-09-01 17:44:48,725 INFO ql.Driver: Executing command(queryId=hp_20240901174448_bbc124ae-2ccd-43b0-9f7b-6348b3077387): EXECUTE IMMEDIATE
2024-09-01 17:44:48,729 INFO ql.Driver: Concurrent mode is disabled, not creating a lock manager
2024-09-01 17:44:48,729 INFO ql.Driver: Executing command(queryId=hp_20240901174448_bbc124ae-2ccd-43b0-9f7b-6348b3077387): CREATE DATABASE financials
2024-09-01 17:44:48,787 INFO ql.Driver: Starting task [Stage:0:DDL] in serial mode
2024-09-01 17:44:48,854 INFO sqlstd.SQLStdHiveAccessController: Created SQLStdHiveAccessController for session context : HiveAuthSessionContext [sessionString=564344f2-2334-4234-912b-8dca3022f491, clientType=HIVECLI]
2024-09-01 17:44:48,863 WARN session.SessionState: METASTORE_FILTER_HOOK will be ignored, since hive.security.authorization.manager is set to instance of HiveAuthorizerFactory.
2024-09-01 17:44:48,864 INFO metastore.HiveMetastoreClient: Metastore configuration metastore.filter.hook changed from org.apache.hadoop.hive.metastore.DefaultMetastoreFilterHookImpl to org.apache.hadoop.hive.g
```



```
hive> use financials;
2024-09-01 17:44:58,527 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:44:58,529 INFO session.SessionState: Updating thread name to 564344f2-2334-4234-912b-8dca3022f491 main
2024-09-01 17:44:58,535 INFO ql.Driver: Compiling command(queryId=hp_20240901174458_6f543471-79b4-4e08-a55f-6b8ac31ae319): use financials
2024-09-01 17:44:58,592 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:44:58,593 INFO metastore.HiveMetaStore: 0: get_database: @hive#financials
2024-09-01 17:44:58,593 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_database: @hive#financials
2024-09-01 17:44:58,604 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-01 17:44:58,604 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:null, properties:null)
2024-09-01 17:44:58,610 INFO ql.Driver: Completed compiling command(queryId=hp_20240901174458_6f543471-79b4-4e08-a55f-6b8ac31ae319); Time taken: 0.075 seconds
2024-09-01 17:44:58,616 INFO rexec.ReExecDriver: Execution #1 of query
2024-09-01 17:44:58,618 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:44:58,621 INFO ql.Driver: Executing command(queryId=hp_20240901174458_6f543471-79b4-4e08-a55f-6b8ac31ae319): use financials
2024-09-01 17:44:58,625 INFO ql.Driver: Starting task (Stage-0:001) in serial mode
2024-09-01 17:44:58,630 INFO metastore.HiveMetaStore: 0: get_database: @hive#financials
2024-09-01 17:44:58,640 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_database: @hive#financials
2024-09-01 17:44:58,660 INFO metastore.HiveMetaStore: 0: get_database: @hive#financials
2024-09-01 17:44:58,663 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_database: @hive#financials
2024-09-01 17:44:58,674 INFO ql.Driver: Completed executing command(queryId=hp_20240901174458_6f543471-79b4-4e08-a55f-6b8ac31ae319); Time taken: 0.052 seconds
OK
2024-09-01 17:44:58,680 INFO ql.Driver: OK
2024-09-01 17:44:58,682 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
Time taken: 0.151 seconds
```

```
hive> INSERT INTO finance_table VALUES(1,'Praveen'),(2,'pavithren'),(3,'monika');
2024-09-01 17:46:58,407 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:46:58,408 INFO session.SessionState: Updating thread name to 564344f2-2334-4234-912b-8dca3022f491 main
2024-09-01 17:46:58,464 INFO ql.Driver: Compiling command(queryId=hp_20240901174658_3701b576-e3ee-463c-bbbf-71d1b8dae695): INSERT INTO finance_table VALUES(1,'Praveen'),(2,'pavithren'),(3,'monika')
2024-09-01 17:46:58,103 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:46:58,104 INFO parse.CalcitePlanner: Starting Semantic Analysis
2024-09-01 17:46:58,135 INFO metastore.HiveMetaStore: 0: get_table : tbl-hive.financials.finance_table
2024-09-01 17:46:58,136 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_table : tbl-hive.financials.finance_table
2024-09-01 17:46:58,542 INFO parse.CalcitePlanner: Completed phase 1 of Semantic Analysis
2024-09-01 17:46:58,543 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-01 17:46:58,544 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-01 17:46:58,545 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-01 17:46:58,552 INFO metastore.HiveMetaStore: 0: get_table : tbl-hive.financials.finance_table
2024-09-01 17:46:58,552 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_table : tbl-hive.financials.finance_table
2024-09-01 17:46:58,596 INFO parse.CalcitePlanner: Completed getting MetaData in Semantic Analysis
2024-09-01 17:47:00,677 INFO ql.Context: New scratch dir is hdfs://localhost:9000/tmp/hive/hp/564344f2-2334-4234-912b-8dca3022f491/hive_2024-09-01_17-46-58_095_601880663549043082-1
2024-09-01 17:47:01,831 INFO metastore.HiveMetaStore: 0: get_not_null_constraints : tbl-hive.dummy_database.dummy_table
2024-09-01 17:47:01,831 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_not_null_constraints : tbl-hive.dummy_database.dummy_table
```

```
hive> CREATE VIEW myview AS SELECT name, id FROM finance_table;
2024-09-01 17:48:37,447 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:48:37,447 INFO session.SessionState: Updating thread name to 564344f2-2334-4234-912b-8dca3022f491 main
2024-09-01 17:48:37,449 INFO ql.Driver: Compiling command(queryId=hp_20240901174837_e0b11859-38b4-43e0-ab42-574577616b5b): CREATE VIEW myview AS SELECT name, id FROM finance_table
2024-09-01 17:48:37,477 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:48:37,477 INFO parse.CalcitePlanner: Starting Semantic Analysis
2024-09-01 17:48:37,478 INFO parse.CalcitePlanner: Creating view financials.myview position=12
2024-09-01 17:48:37,503 INFO metastore.HiveMetaStore: 0: get_database: @hive#financials
2024-09-01 17:48:37,504 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_database: @hive#financials
2024-09-01 17:48:37,532 INFO parse.CalcitePlanner: Completed phase 1 of Semantic Analysis
2024-09-01 17:48:37,532 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-01 17:48:37,534 INFO metastore.HiveMetaStore: 0: get_table : tbl-hive.financials.finance_table
2024-09-01 17:48:37,537 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_table : tbl-hive.financials.finance_table
2024-09-01 17:48:37,576 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-01 17:48:37,576 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-01 17:48:37,606 INFO ql.Context: New scratch dir is hdfs://localhost:9000/tmp/hive/hp/564344f2-2334-4234-912b-8dca3022f491/hive_2024-09-01_17-48-37_474_5103369802697496020-1
2024-09-01 17:48:37,606 INFO parse.CalcitePlanner: Completed getting MetaData in Semantic Analysis
2024-09-01 17:48:37,614 INFO metastore.HiveMetaStore: 0: get_not_null_constraints : tbl-hive.financials.finance_table
2024-09-01 17:48:37,615 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_not_null_constraints : tbl-hive.financials.finance_table
2024-09-01 17:48:37,618 INFO metastore.HiveMetaStore: 0: get_primary_keys : tbl-hive.financials.finance_table
2024-09-01 17:48:37,619 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_primary_keys : tbl-hive.financials.finance_table
2024-09-01 17:48:37,627 INFO metastore.HiveMetaStore: 0: get_primary_keys : tbl-hive.financials.finance_table
```

```
hive> SELECT*FROM myview;
2024-09-01 17:48:49,236 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:48:49,237 INFO session.SessionState: Updating thread name to 564344f2-2334-4234-912b-8dca3022f491 main
2024-09-01 17:48:49,240 INFO ql.Driver: Compiling command(queryId=hp_20240901174849_5baffc89-d4f5-413d-a6f8-1ddff2f6b1f8): SELECT*FROM myview
2024-09-01 17:48:49,274 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:48:49,274 INFO parse.CalcitePlanner: Starting Semantic Analysis
2024-09-01 17:48:49,276 INFO parse.CalcitePlanner: Completed phase 1 of Semantic Analysis
2024-09-01 17:48:49,277 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-01 17:48:49,278 INFO metastore.HiveMetaStore: 0: get_table : tbl-hive.financials.myview
2024-09-01 17:48:49,280 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_table : tbl-hive.financials.myview
2024-09-01 17:48:49,341 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-01 17:48:49,342 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-01 17:48:49,343 INFO metastore.HiveMetaStore: 0: get_table : tbl-hive.financials.finance_table
2024-09-01 17:48:49,344 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_table : tbl-hive.financials.finance_table
2024-09-01 17:48:49,367 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-01 17:48:49,367 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-01 17:48:49,369 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-01 17:48:49,387 INFO ql.Context: New scratch dir is hdfs://localhost:9000/tmp/hive/hp/564344f2-2334-4234-912b-8dca3022f491/hive_2024-09-01_17-48-49_272_1852354091646623438-1
2024-09-01 17:48:49,388 INFO parse.CalcitePlanner: Completed getting MetaData in Semantic Analysis
2024-09-01 17:48:49,410 INFO results.QueryResultsCache: Initializing query results cache at /tmp/hive/_resultscache
2024-09-01 17:48:49,434 INFO results.QueryResultsCache: Query results cache: cachedirectory /tmp/hive/_resultscache/_results-b1e73605-1f59-4050-be60-69a7dd82e726, maxCacheSize 2147483648, maxEntrySize 10485760, maxEntryLifetime 3600000
```

```
SQL Select Administrator: Command Prompt
2024-09-01 17:48:49,795 INFO ql.Driver: OK
2024-09-01 17:48:49,798 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:48:49,814 INFO mapred.FileInputFormat: Total input files to process : 1
2024-09-01 17:48:49,863 INFO exec.TableScanOperator: RECORDS_OUT_INTERMEDIATE=0, RECORDS_OUT_OPERATOR_TS=0,3
2024-09-01 17:48:49,864 INFO exec.SelectOperator: RECORDS_OUT_INTERMEDIATE=0, RECORDS_OUT_OPERATOR_SEL=1,3
2024-09-01 17:48:49,865 INFO exec.ListSinkOperator: RECORDS_OUT_INTERMEDIATE=0, RECORDS_OUT_OPERATOR_LIST_SINK=3,3
Praveen 1
pavithren 2
monika 3
Time taken: 0.56 seconds, Fetched: 3 row(s)
2024-09-01 17:48:49,879 INFO ql.Driver: Time taken: 0.56 seconds, Fetched: 3 row(s)
2024-09-01 17:48:49,880 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:48:49,882 INFO session.SessionState: Updating thread name to main
hive> DESCRIBE finance_table;
2024-09-01 17:48:58,101 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:48:58,104 INFO session.SessionState: Updating thread name to 564344f2-2334-4234-912b-8dca3022f491 main
2024-09-01 17:48:58,117 INFO ql.Driver: Compiling command(queryId=hp_20240901174858_7ee5999a-022c-4bc9-8b8b-1ea9ba8b6b6b): DESCRIBE finance_table
2024-09-01 17:48:58,117 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:48:58,151 INFO metastore.HiveMetaStore: 0: get_table : tbl-hive.financials.finance_table
2024-09-01 17:48:58,152 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_table : tbl-hive.financials.finance_table
2024-09-01 17:48:58,191 INFO parse.DOLSemanticAnalyzer: analyzeDescribeTable done
2024-09-01 17:48:58,192 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-01 17:48:58,193 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:[fieldSchema(name:col_name, type:string, comment:from deseriali...), fieldSchema(name:comment, type:string, comment:from deseriali...)], properties:null)
2024-09-01 17:48:58,194 INFO ql.Driver: Initializing operator LIST_SINK[0]
2024-09-01 17:48:58,195 INFO ql.Driver: Completed compiling command(queryId=hp_20240901174858_7ee5999a-022c-4bc9-8b8b-1ea9ba8b6b6b); Time taken: 0.091 seconds
2024-09-01 17:48:58,196 INFO rexec.ReExecDriver: Execution #1 of query
2024-09-01 17:48:58,199 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:48:58,199 INFO ql.Driver: Executing command(queryId=hp_20240901174858_7ee5999a-022c-4bc9-8b8b-1ea9ba8b6b6b): DESCRIBE finance_table
2024-09-01 17:48:58,202 INFO ql.Driver: Starting task (Stage-0:001) in serial mode
2024-09-01 17:48:58,209 INFO metastore.HiveMetaStore: 0: get_table : tbl-hive.financials.finance_table
2024-09-01 17:48:58,212 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_table : tbl-hive.financials.finance_table
2024-09-01 17:48:58,300 INFO ql.Driver: Completed executing command(queryId=hp_20240901174858_7ee5999a-022c-4bc9-8b8b-1ea9ba8b6b6b); Time taken: 0.101 seconds
OK
2024-09-01 17:48:58,302 INFO ql.Driver: OK
2024-09-01 17:48:58,303 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:48:58,316 INFO mapred.FileInputFormat: Total input files to process : 1
2024-09-01 17:48:58,392 INFO exec.ListSinkOperator: RECORDS_OUT_INTERMEDIATE=0, RECORDS_OUT_OPERATOR_LIST_SINK=0,2
id
name
Time taken: 0.203 seconds, Fetched: 2 row(s)
2024-09-01 17:48:58,403 INFO ql.Driver: Time taken: 0.203 seconds, Fetched: 2 row(s)
2024-09-01 17:48:58,406 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:48:58,417 INFO session.SessionState: Updating thread name to main
hive> ALTER TABLE finance_table ADD COLUMNS(age INT);
2024-09-01 17:50:22,362 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:50:22,363 INFO session.SessionState: Updating thread name to 564344f2-2334-4234-912b-8dca3022f491 main
2024-09-01 17:50:22,369 INFO ql.Driver: Compiling command(queryId=hp_20240901175022_6371b056-2a92-4b73-a860-34da0e1ef9b2): ALTER TABLE finance_table ADD COLUMNS(age INT)
2024-09-01 17:50:22,414 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
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hive> ALTER TABLE finance_table ADD COLUMNS(age INT);
2024-09-01 17:50:22,362 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:50:22,363 INFO session.SessionState: Updating thread name to 564344f2-2334-4234-912b-8dca3022f491 main
2024-09-01 17:50:22,369 INFO ql.Driver: Compiling command(queryId=hp_20240901175022_61713b56-2d92-4b73-a8e0-34a03e1df9b2): ALTER TABLE finance_table ADD COLUMNS(age INT)
2024-09-01 17:50:22,414 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:50:22,434 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.financials.finance_table
2024-09-01 17:50:22,435 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_table : tbl=hive.financials.finance_table
2024-09-01 17:50:22,486 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-01 17:50:22,487 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:null, properties:null)
2024-09-01 17:50:22,488 INFO ql.Driver: Completed compiling command(queryId=hp_20240901175022_61713b56-2d92-4b73-a8e0-34a03e1df9b2); Time taken: 0.119 seconds
2024-09-01 17:50:22,490 INFO rexec.ReExecDriver: Execution #1 of query
2024-09-01 17:50:22,491 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-01 17:50:22,492 INFO ql.Driver: Executing command(queryId=hp_20240901175022_61713b56-2d92-4b73-a8e0-34a03e1df9b2): ALTER TABLE finance_table ADD COLUMNS(age INT)
2024-09-01 17:50:22,495 INFO ql.Driver: Starting task [Stage-0:DOL] in serial mode
2024-09-01 17:50:22,502 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.financials.finance_table
2024-09-01 17:50:22,503 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=get_table : tbl=hive.financials.finance_table
2024-09-01 17:50:22,555 INFO metastore.HiveMetaStore: 0: alter_table: hive.financials.finance_table newtbl=finance_table
2024-09-01 17:50:22,556 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=alter_table: hive.financials.finance_table newtbl=finance_table
2024-09-01 17:50:22,728 INFO ql.Driver: Completed executing command(queryId=hp_20240901175022_61713b56-2d92-4b73-a8e0-34a03e1df9b2); Time taken: 0.236 seconds
OK
2024-09-01 17:50:22,729 INFO ql.Driver: OK
2024-09-01 17:50:22,730 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
Time taken: 0.371 seconds
2024-09-01 17:50:22,741 INFO CliDriver: Time taken: 0.371 seconds
2024-09-01 17:50:22,742 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:50:22,743 INFO session.SessionState: Resetting thread name to main
```

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hive> quit;
2024-09-01 17:51:39,259 INFO conf.HiveConf: Using the default value passed in for log id: 564344f2-2334-4234-912b-8dca3022f491
2024-09-01 17:51:39,260 INFO session.SessionState: Updating thread name to 564344f2-2334-4234-912b-8dca3022f491 main
2024-09-01 17:51:39,299 INFO session.SessionState: Deleted directory: /tmp/hive/hp/564344f2-2334-4234-912b-8dca3022f491 on fs with scheme hdfs
2024-09-01 17:51:39,303 INFO session.SessionState: Deleted directory: C:/Users/hp/AppData/Local/Temp/hp/564344f2-2334-4234-912b-8dca3022f491 on fs with scheme file
2024-09-01 17:51:39,337 INFO metastore.HiveMetaStore: 0: Cleaning up thread local RawStore...
2024-09-01 17:51:39,337 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=Cleaning up thread local RawStore...
2024-09-01 17:51:39,340 INFO metastore.HiveMetaStore: 0: Done cleaning up thread local RawStore
2024-09-01 17:51:39,345 INFO HiveMetaStore.audit: ugi=hp ip=unknown-ip-addr cmd=Done cleaning up thread local RawStore
```

RESULT:

Thus to create tables in Hive and write queries to access the data in the table is completed successfully

