

EXP: 5 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:

Hive Download and installation:

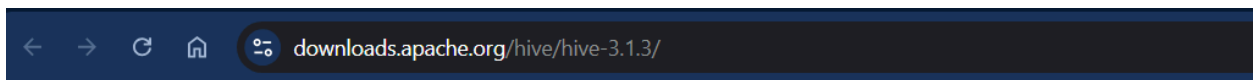
1. Hive Installation setup: - Download and install Apache Derby version 10.14.2.0:
https://db.apache.org/derby/derby_downloads.html

For Java 8 and Higher (releases which support lambda expressions)



- [10.14.2.0](#) (May 3, 2018 / SVN 1828579)
- [10.13.1.1](#) (October 25, 2016 / SVN 1766613)

#For+Java+8+and+Higher -Download and install Apache Hive version 3.1.3:

<https://downloads.apache.org/hive/hive-3.1.3/>

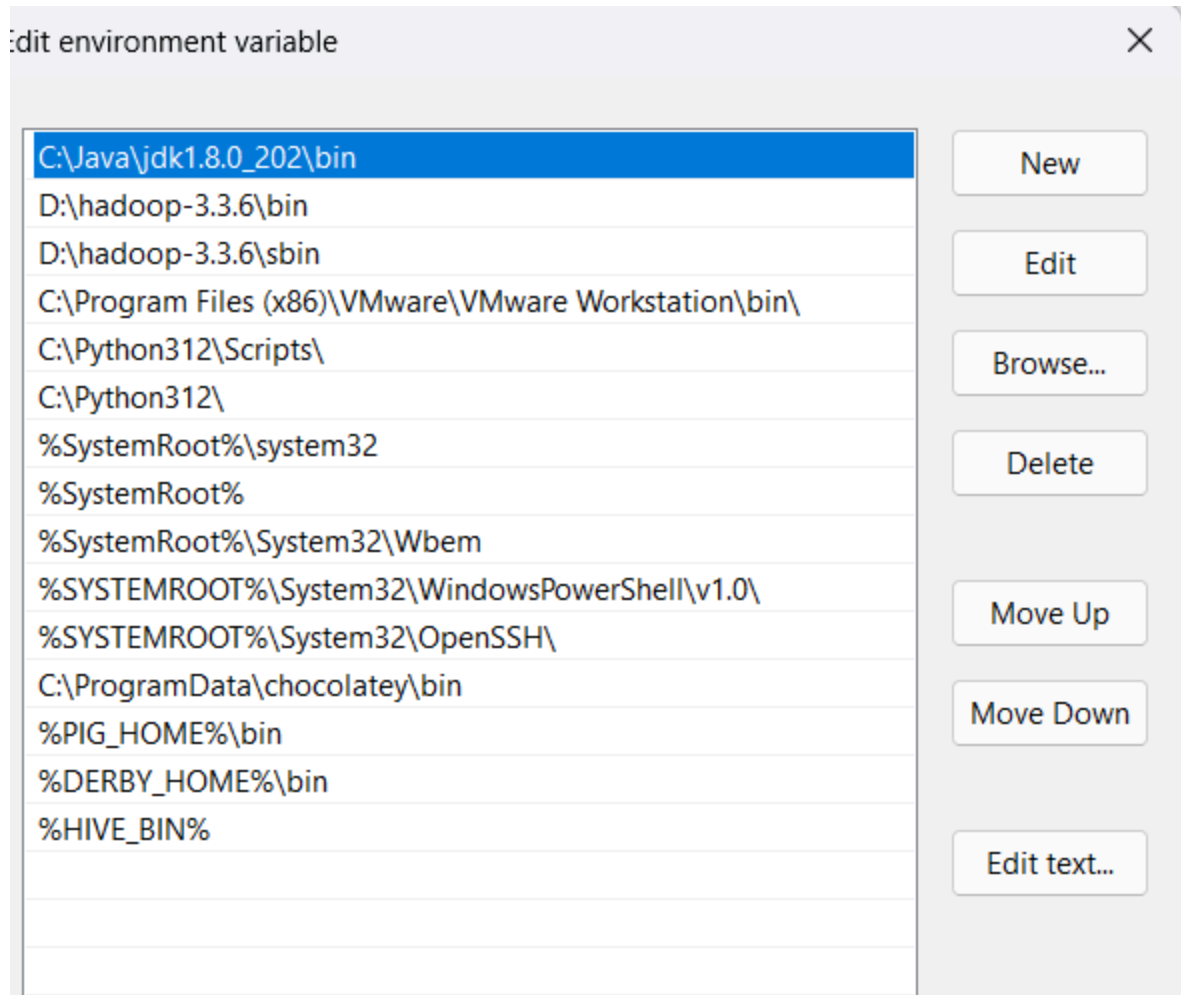


Index of /hive/hive-3.1.3

Name	Last modified	Size	Description
 Parent Directory		-	
 apache-hive-3.1.3-bin.tar.gz	2022-04-08 17:42	312M	

2. Add environment variables:

System variables	
Variable	Value
DERBY_HOME	D:\db-derby-10.14.2.0-bin
DriverData	C:\Windows\System32\Drivers\DriverData
HIVE_BIN	%HIVE_HOME%\bin
HIVE_HOME	D:\apache-hive-3.1.3-bin
HIVE_LIB	%HIVE_HOME%\lib



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

4. 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>

5. Starting Hadoop Services Open PowerShell as administrator and go to Hadoop sbin directory and start hadoop services using the following commands:

start-dfs.cmd
start-yarn.cmd

```
Administrator: Command Prompt - hive
Microsoft Windows [Version 10.0.22621.1702]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>jps
7968 ResourceManager
9248 Jps
14308 DataNode
7700 Main
9096 NameNode
15388 NodeManager
```

6. Derby Network Server: Open another PowerShell window and run the following command to open Derby:

StartNetworkServer -h 0.0.0.0

```
Administrator: Command Prompt - StartNetworkServer -h 0.0.0.0
Microsoft Windows [Version 10.0.22621.1702]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>StartNetworkServer -h 0.0.0.0
Tue Sep 17 19:44:25 IST 2024 : Security manager installed using the Basic server security policy.
Tue Sep 17 19:44:30 IST 2024 : Apache Derby Network Server - 10.14.2.0 - (1828579) started and ready to accept connections on port 1527
```

Go to first PowerShell window and check whether NetworkServerControl is running.

```
Administrator: Command Prompt - hive
C:\Windows\System32>jps
7968 ResourceManager
14308 DataNode
7700 Main
9096 NameNode
9544 NetworkServerControl
15388 NodeManager
21356 Jps
```

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

hive --service schematool -dbType derby --initSchema

8. Open Hive shell by typing: hive

```
Administrator: Command Prompt - hive

D:\apache-hive-3.1.3-bin\bin>hive
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/D:/hadoop-3.3.6/share/hadoop/common/lib/slf4j-reload4j-1.7.36.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/D:/apache-hive-3.1.3-bin/lib/log4j-slf4j-impl-2.17.1.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]
2024-09-17 19:45:57,623 INFO conf.HiveConf: Found configuration file null
2024-09-17 19:45:58,387 WARN common.LogUtils: hive-site.xml not found on CLASSPATH
Hive Session ID = c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:45:58,419 INFO SessionState: Hive Session ID = c3ff3761-e094-4ec4-829c-1d0683980b36

Logging initialized using configuration in jar:file:/D:/apache-hive-3.1.3-bin/lib/hive-common-3.1.3.jar!/hive-log4j2.properties Async: true
2024-09-17 19:45:58,463 INFO SessionState:
Logging initialized using configuration in jar:file:/D:/apache-hive-3.1.3-bin/lib/hive-common-3.1.3.jar!/hive-log4j2.properties Async: true
2024-09-17 19:45:59,072 INFO session.SessionState: Created HDFS directory: /tmp/hive/ADMIN
2024-09-17 19:45:59,076 INFO session.SessionState: Created HDFS directory: /tmp/hive/ADMIN/c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:45:59,079 INFO session.SessionState: Created local directory: C:/Users/ADMIN/AppData/Local/Temp/ADMIN/c3ff3761-e094-4ec4-829c-1d0683980b36/_tmp_space.db
2024-09-17 19:45:59,086 INFO session.SessionState: Created HDFS directory: /tmp/hive/ADMIN/c3ff3761-e094-4ec4-829c-1d0683980b36/_tmp_space.db
2024-09-17 19:45:59,096 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:45:59,097 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 19:45:59,757 INFO metastore.HiveMetaStore: 0: Opening raw store with implementation class:org.apache.hadoop.hive.metastore.ObjectStore
2024-09-17 19:45:59,780 WARN metastore.ObjectStore: datanucleus.autoStartMechanismMode is set to unsupported value null . Setting it to value: ignored
2024-09-17 19:45:59,780 INFO metastore.ObjectStore: ObjectStore, initialize called
2024-09-17 19:45:59,782 INFO conf.MetastoreConf: Unable to find config file hive-site.xml
2024-09-17 19:45:59,782 INFO conf.MetastoreConf: Found configuration file null
2024-09-17 19:45:59,783 INFO conf.MetastoreConf: Unable to find config file hivemetastore-site.xml
2024-09-17 19:45:59,783 INFO conf.MetastoreConf: Found configuration file null
2024-09-17 19:45:59,784 INFO conf.MetastoreConf: Unable to find config file metastore-site.xml
2024-09-17 19:45:59,784 INFO conf.MetastoreConf: Found configuration file null
2024-09-17 19:45:59,915 INFO DataNucleus.Persistence: Property datanucleus.cache.level2 unknown - will be ignored
2024-09-17 19:46:00,226 INFO hikari.HikariDataSource: HikariPool-1 - Starting...
2024-09-17 19:46:00,230 WARN util.DriverDataSource: Registered driver with driverClassName=org.apache.derby.jdbc.EmbeddedDriver was not found, trying direct instantiation
2024-09-17 19:46:00,416 INFO pool.PoolBase: HikariPool-1 - Driver does not support get/set network timeout for connections. (Feature not implemented: No details.)
2024-09-17 19:46:00,419 INFO hikari.HikariDataSource: HikariPool-1 - Start completed.
2024-09-17 19:46:00,455 INFO hikari.HikariDataSource: HikariPool-2 - Starting...
2024-09-17 19:46:00,455 WARN util.DriverDataSource: Registered driver with driverClassName=org.apache.derby.jdbc.EmbeddedDriver was not found, trying direct instantiation
2024-09-17 19:46:00,457 INFO pool.PoolBase: HikariPool-2 - Driver does not support get/set network timeout for connections. (Feature not implemented: No details.)
2024-09-17 19:46:00,457 INFO hikari.HikariDataSource: HikariPool-2 - Start completed.
2024-09-17 19:46:00,707 INFO metastore.ObjectStore: Setting MetaStore object pin classes with hive.metastore.cache.pinobjtypes="Table,StorageDescriptor,SerdeInfo,Part
2024-09-17 19:46:00,839 INFO metastore.MetaStoreDirectSql: Using direct SQL, underlying DB is DERBY
2024-09-17 19:46:00,840 INFO metastore.ObjectStore: Initialized ObjectStore
```

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 db1;
```

```
Administrator: Command Prompt - hive
hive> create database db1;
2024-09-17 19:46:12,866 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:46:12,923 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917194612_a74f7511-2d25-41d8-8ce8-1c3933493d85): create database db1
2024-09-17 19:46:13,229 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:46:13,239 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-17 19:46:13,241 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:null, properties:null)
2024-09-17 19:46:13,246 INFO ql.Driver: Completed compiling command(queryId=ADMIN_20240917194612_a74f7511-2d25-41d8-8ce8-1c3933493d85); Time taken: 0.345 seconds
2024-09-17 19:46:13,247 INFO reexec.ReExecDriver: Execution #1 of query
2024-09-17 19:46:13,248 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:46:13,248 INFO ql.Driver: Executing command(queryId=ADMIN_20240917194612_a74f7511-2d25-41d8-8ce8-1c3933493d85): create database db1
2024-09-17 19:46:13,259 INFO ql.Driver: Starting task [Stage-0:DDL] in serial mode
2024-09-17 19:46:13,274 INFO sqlstd.SQLStdHiveAccessController: Created SQLStdHiveAccessController for session context : HiveAuthzSessionContext [sessionString=c3ff3761-e094-4ec4-829c-1d0683980b36]
2024-09-17 19:46:13,276 WARN session.SessionState: METASTORE_FILTER_HOOK will be ignored, since hive.security.authorization.manager is set to instance of HiveAuthorizerFactory.
2024-09-17 19:46:13,276 INFO metastore.HiveMetaStoreClient: Metastore configuration metastore.filter.hook changed from org.apache.hadoop.hive.metastore.DefaultMetaStoreFilterHookImpl to org.apache.hadoop.hive.metastore.DefaultMetaStoreFilterHook
2024-09-17 19:46:13,278 INFO metastore.HiveMetaStore: 0: Cleaning up thread local RawStore...
2024-09-17 19:46:13,279 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=Cleaning up thread local RawStore...
2024-09-17 19:46:13,281 INFO metastore.HiveMetaStore: 0: Done cleaning up thread local RawStore
2024-09-17 19:46:13,281 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=Done cleaning up thread local RawStore
2024-09-17 19:46:13,283 INFO metastore.HiveMetaStore: 0: Opening raw store with implementation class:org.apache.hadoop.hive.metastore.ObjectStore
2024-09-17 19:46:13,283 WARN metastore.ObjectStore: datanucleus.autoStartMechanismMode is set to unsupported value null . Setting it to value: ignored
2024-09-17 19:46:13,284 INFO metastore.ObjectStore: ObjectStore, initialize called
2024-09-17 19:46:13,284 INFO metastore.MetaStoreDirectSql: Using direct SQL, underlying DB is DERBY
2024-09-17 19:46:13,284 INFO metastore.ObjectStore: Initialized ObjectStore
2024-09-17 19:46:13,285 INFO metastore.RetryingMetaStoreClient: RetryingMetaStoreClient proxy=class org.apache.hadoop.hive.ql.metadata.SessionHiveMetaStoreClient ugi=ADMIN (auth:SIMPLE)
2024-09-17 19:46:13,290 WARN metastore.ObjectStore: datanucleus.autoStartMechanismMode is set to unsupported value null . Setting it to value: ignored
2024-09-17 19:46:13,290 INFO metastore.ObjectStore: ObjectStore, initialize called
2024-09-17 19:46:13,292 INFO metastore.MetaStoreDirectSql: Using direct SQL, underlying DB is DERBY
2024-09-17 19:46:13,292 INFO metastore.ObjectStore: Initialized ObjectStore
2024-09-17 19:46:13,292 INFO metastore.RetryingMetaStoreClient: RetryingMetaStoreClient proxy=class org.apache.hadoop.hive.ql.metadata.SessionHiveMetaStoreClient ugi=ADMIN (auth:SIMPLE)
2024-09-17 19:46:13,292 INFO metastore.HiveMetaStore: 0: create_database: Database(name=db1, description:null, locationUri:hdfs://localhost:9000/user/hive/warehouse/db1.db, parameters:ownerType=USER, catalogName=hive)
2024-09-17 19:46:13,292 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=create_database: Database(name=db1, description:null, locationUri:hdfs://localhost:9000/user/hive/warehouse/db1.db, parameters:null, ownerName=ADMIN, ownerType=USER, catalogName=hive)
2024-09-17 19:46:13,293 WARN metastore.ObjectStore: Failed to get database hive.db1, returning NoSuchObjectException
2024-09-17 19:46:13,304 INFO utils.FileUtils: Creating directory if it doesn't exist: hdfs://localhost:9000/user/hive/warehouse/db1.db
2024-09-17 19:46:13,395 INFO ql.Driver: Completed executing command(queryId=ADMIN_20240917194612_a74f7511-2d25-41d8-8ce8-1c3933493d85); Time taken: 0.147 seconds
OK
2024-09-17 19:46:13,396 INFO ql.Driver: OK
2024-09-17 19:46:13,396 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
Time taken: 0.498 seconds
2024-09-17 19:46:13,398 INFO CliDriver: Time taken: 0.498 seconds
2024-09-17 19:46:13,399 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:46:13,399 INFO session.SessionState: Resetting thread name to main
```

Activate V
Go to Setting

2. Verify the database is present: SHOW DATABASES;

```
Administrator: Command Prompt - hive
hive> show databases;
2024-09-17 19:46:23,878 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:46:23,878 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 19:46:23,880 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917194623_6d915dd8-a41f-4592-b187-b0968b89cf3f): show databases
2024-09-17 19:46:23,891 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:46:23,897 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-17 19:46:23,932 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:[FieldSchema(name=database_name, type:string, comment:from deserializer)], properties:null)
2024-09-17 19:46:23,998 INFO exec.ListSinkOperator: Initializing operator LIST_SINK[0]
2024-09-17 19:46:24,003 INFO ql.Driver: Completed compiling command(queryId=ADMIN_20240917194623_6d915dd8-a41f-4592-b187-b0968b89cf3f); Time taken: 0.123 seconds
2024-09-17 19:46:24,004 INFO reexec.ReExecDriver: Execution #1 of query
2024-09-17 19:46:24,004 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:46:24,005 INFO ql.Driver: Executing command(queryId=ADMIN_20240917194623_6d915dd8-a41f-4592-b187-b0968b89cf3f): show databases
2024-09-17 19:46:24,005 INFO ql.Driver: Starting task [Stage-0:DDL] in serial mode
2024-09-17 19:46:24,006 INFO metastore.HiveMetaStore: 0: get_databases: @hive#
2024-09-17 19:46:24,010 INFO exec.DDLTask: results : 2
2024-09-17 19:46:24,039 INFO ql.Driver: Completed executing command(queryId=ADMIN_20240917194623_6d915dd8-a41f-4592-b187-b0968b89cf3f); Time taken: 0.033 seconds
OK
2024-09-17 19:46:24,039 INFO ql.Driver: OK
2024-09-17 19:46:24,039 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:46:24,046 INFO Configuration.deprecation: mapred.input.dir is deprecated. Instead, use mapreduce.input.fileinputformat.inputdir
2024-09-17 19:46:24,072 INFO mapred.FileInputFormat: Total input files to process : 1
2024-09-17 19:46:24,123 INFO exec.ListSinkOperator: RECORDS_OUT_INTERMEDIATE:0, RECORDS_OUT_OPERATOR_LIST_SINK_0:2, db1
default
Time taken: 0.161 seconds, Fetched: 2 row(s)
2024-09-17 19:46:24,130 INFO CliDriver: Time taken: 0.161 seconds, Fetched: 2 row(s)
2024-09-17 19:46:24,131 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:46:24,131 INFO session.SessionState: Resetting thread name to main
```

3. Switch to the new database: Switch to the newly created database: USE db1;

```
Administrator: Command Prompt - hive
hive> use db1;
2024-09-17 19:46:34,120 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:46:34,120 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 19:46:34,121 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917194634_3967201a-3af2-49e1-84aa-9dc9af00c63b): use db1
2024-09-17 19:46:34,130 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:46:34,131 INFO metastore.HiveMetaStore: 0: get_database: @hive#db1
2024-09-17 19:46:34,131 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_database: @hive#db1
2024-09-17 19:46:34,134 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-17 19:46:34,134 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:null, properties:null)
2024-09-17 19:46:34,135 INFO ql.Driver: Completed compiling command(queryId=ADMIN_20240917194634_3967201a-3af2-49e1-84aa-9dc9af00c63b); Time taken: 0.014 second
2024-09-17 19:46:34,135 INFO rexec.ReExecDriver: Execution #1 of query
2024-09-17 19:46:34,135 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:46:34,136 INFO ql.Driver: Executing command(queryId=ADMIN_20240917194634_3967201a-3af2-49e1-84aa-9dc9af00c63b): use db1
2024-09-17 19:46:34,139 INFO ql.Driver: Starting task [Stage-0:DOL] in serial mode
2024-09-17 19:46:34,140 INFO metastore.HiveMetaStore: 0: get_database: @hive#db1
2024-09-17 19:46:34,140 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_database: @hive#db1
2024-09-17 19:46:34,141 INFO metastore.HiveMetaStore: 0: get_database: @hive#db1
2024-09-17 19:46:34,141 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_database: @hive#db1
2024-09-17 19:46:34,143 INFO ql.Driver: Completed executing command(queryId=ADMIN_20240917194634_3967201a-3af2-49e1-84aa-9dc9af00c63b); Time taken: 0.007 second
OK
2024-09-17 19:46:34,143 INFO ql.Driver: OK
2024-09-17 19:46:34,144 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
Time taken: 0.023 seconds
2024-09-17 19:46:34,144 INFO CliDriver: Time taken: 0.023 seconds
2024-09-17 19:46:34,144 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:46:34,144 INFO session.SessionState: Resetting thread name to main
```

Create a Table in Hive:

Create a simple table in your database:

CREATE TABLE stud (id INT, name STRING);

```
Administrator: Command Prompt - hive
hive> create table stud(id int,name string);
2024-09-17 19:46:54,008 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:46:54,009 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 19:46:54,010 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917194654_03a2859d-ab79-4ac2-9e9d-fb648605ac9f): create table stud(id int,name string)
2024-09-17 19:46:54,036 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:46:54,039 INFO parse.CalcitePlanner: Starting Semantic Analysis
2024-09-17 19:46:54,043 INFO parse.CalcitePlanner: Creating table db1.stud position=13
2024-09-17 19:46:54,050 INFO metastore.HiveMetaStore: 0: get_database: @hive#db1
2024-09-17 19:46:54,050 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_database: @hive#db1
2024-09-17 19:46:54,059 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-17 19:46:54,060 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:null, properties:null)
2024-09-17 19:46:54,060 INFO ql.Driver: Completed compiling command(queryId=ADMIN_20240917194654_03a2859d-ab79-4ac2-9e9d-fb648605ac9f); Time taken: 0.05 seconds
2024-09-17 19:46:54,061 INFO rexec.ReExecDriver: Execution #1 of query
2024-09-17 19:46:54,063 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:46:54,063 INFO ql.Driver: Executing command(queryId=ADMIN_20240917194654_03a2859d-ab79-4ac2-9e9d-fb648605ac9f): create table stud(id int,name string)
2024-09-17 19:46:54,064 INFO ql.Driver: Starting task [Stage-0:DOL] in serial mode
2024-09-17 19:46:54,212 INFO metastore.HiveMetaStore: 0: create_table: Table(tableName=stud, dbName=db1, owner=ADMIN, createTime:1726582614, lastAccessTime:0, retention:0, sd:StorageDescriptor(cols:[FieldSchema(name=id, type:int, comment:null)], location:null, inputFormat:org.apache.hadoop.mapred.TextInputFormat, outputFormat:org.apache.hadoop.hive ql.io.HiveIgnoreKeyTextOutputFormat, compressed:false, numBuckets:-1, serdeInfo:SerDeInfo(name=null, serializationLib:org.apache.hadoop.hive.serde2.lazy.LazySimpleSerDe, parameters:{serializationRtCols:[], parameters:{}, skewedInfo:SkewedInfo(skewedColNames:[], skewedColValues:[], skewedColValueLocationMaps:{}), storedAsSubDirectories:false, partitionKeys:[], parameters:Size=0, COLUMN_STATS_ACCURATE={"BASIC_STATS":"true", "COLUMN_STATS":{"id":"true", "name":"true"}}, numFiles=0, bucketing_version=2), viewOriginalText:null, viewExpandedText:null, leges:PrincipalPrivilegeSet(userPrivileges:{ADMIN=[PrivilegeGrantInfo(privilege=INSERT, createTime:-1, grantor:ADMIN, grantorType:USER, grantOption:true), PrivilegeGrantInfo(privilege=DELETE, createTime:-1, grantor:ADMIN, grantorType:USER, grantOption:true)]}, groupPrivileges:null, rolePrivileges:null), temporary:false, catName=hive, ownerType:USER)
2024-09-17 19:46:54,212 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=create_table: Table(tableName=stud, dbName=db1, owner=ADMIN, createTime:1726582614, lastAccessTime:0, retention:0, sd:StorageDescriptor(cols:[FieldSchema(name=id, type:int, comment:null)], location:null, inputFormat:org.apache.hadoop.mapred.TextInputFormat, outputFormat:org.apache.hadoop.hive ql.io.HiveIgnoreKeyTextOutputFormat, compressed:false, numBuckets:-1, serdeInfo:SerDeInfo(name=null, serializationLib:org.apache.hadoop.hive.serde2.lazy.LazySimpleSerDe, parameters:{serializationRtCols:[], parameters:{}, skewedInfo:SkewedInfo(skewedColNames:[], skewedColValues:[], skewedColValueLocationMaps:{}), storedAsSubDirectories:false, partitionKeys:[], parameters:Size=0, COLUMN_STATS_ACCURATE={"BASIC_STATS":"true", "COLUMN_STATS":{"id":"true", "name":"true"}}, numFiles=0, bucketing_version=2), viewOriginalText:null, viewExpandedText:null, leges:PrincipalPrivilegeSet(userPrivileges:{ADMIN=[PrivilegeGrantInfo(privilege=INSERT, createTime:-1, grantor:ADMIN, grantorType:USER, grantOption:true), PrivilegeGrantInfo(privilege=DELETE, createTime:-1, grantor:ADMIN, grantorType:USER, grantOption:true)]}, groupPrivileges:null, rolePrivileges:null), temporary:false, catName=hive, ownerType:USER)
2024-09-17 19:46:54,239 INFO utils.FileUtils: Creating directory if it doesn't exist: hdfs://localhost:9000/user/hive/warehouse/db1.db/stud
2024-09-17 19:46:54,339 INFO ql.Driver: Completed executing command(queryId=ADMIN_20240917194654_03a2859d-ab79-4ac2-9e9d-fb648605ac9f); Time taken: 0.276 seconds
OK
2024-09-17 19:46:54,340 INFO ql.Driver: OK
2024-09-17 19:46:54,340 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
Time taken: 0.331 seconds
2024-09-17 19:46:54,341 INFO CliDriver: Time taken: 0.331 seconds
2024-09-17 19:46:54,341 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:46:54,342 INFO session.SessionState: Resetting thread name to main
```

Insert values into the table: You can insert sample data into the table:
insert into stud values(1,'Madhu'),(2,'Mitha'),(3,'Kannan'),(4,'Deepa');


```
Administrator: Command Prompt - hive
hive> insert into stud values(1,'Madhu'),(2,'Mitha'),(3,'Kannan'),(4,'Deepa');
2024-09-17 19:47:55,439 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:47:55,440 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 19:47:55,442 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917194755_ed46258c-4305-4f59-a7c9-553f908cb6e1): insert into stud values(1,'Madhu'),(2,'Mitha'),(3,'Kannan')
2024-09-17 19:47:55,453 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:47:55,454 INFO parse.CalcitePlanner: Starting Semantic Analysis
2024-09-17 19:47:55,460 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.stud
2024-09-17 19:47:55,460 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.stud
2024-09-17 19:47:55,559 INFO parse.CalcitePlanner: Completed phase 1 of Semantic Analysis
2024-09-17 19:47:55,560 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-17 19:47:55,560 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-17 19:47:55,560 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-17 19:47:55,562 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.stud
2024-09-17 19:47:55,562 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.stud
2024-09-17 19:47:55,572 INFO parse.CalcitePlanner: Completed getting MetaData in Semantic Analysis
2024-09-17 19:47:56,070 INFO ql.Context: New scratch dir is hdfs://localhost:9000/tmp/hive/ADMIN/c3ff3761-e094-4ec4-829c-1d0683980b36/hive_2024-09-17_19-47-55_450_4227153324653473524-1
2024-09-17 19:47:56,196 INFO metastore.HiveMetaStore: 0: get_not_null_constraints : tbl=hive._dummy_database._dummy_table
2024-09-17 19:47:56,196 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_not_null_constraints : tbl=hive._dummy_database._dummy_table
2024-09-17 19:47:56,213 INFO metastore.HiveMetaStore: 0: get_primary_keys : tbl=hive._dummy_database._dummy_table
2024-09-17 19:47:56,214 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_primary_keys : tbl=hive._dummy_database._dummy_table
2024-09-17 19:47:56,230 INFO metastore.HiveMetaStore: 0: get_primary_keys : tbl=hive._dummy_database._dummy_table
2024-09-17 19:47:56,230 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_primary_keys : tbl=hive._dummy_database._dummy_table
2024-09-17 19:47:56,231 INFO metastore.HiveMetaStore: 0: get_unique_constraints : tbl=hive._dummy_database._dummy_table
2024-09-17 19:47:56,232 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_unique_constraints : tbl=hive._dummy_database._dummy_table
2024-09-17 19:47:56,244 INFO metastore.HiveMetaStore: 0: get_foreign_keys : parentdb=null parenttbl=null foreigndb=_dummy_database foreigntbl=_dummy_table
2024-09-17 19:47:56,245 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_foreign_keys : parentdb=null parenttbl=null foreigndb=_dummy_database foreigntbl=_dummy_table
2024-09-17 19:47:56,849 INFO metastore.HiveMetaStore: 0: get_databases: @hive#
2024-09-17 19:47:56,849 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_databases: @hive#
2024-09-17 19:47:56,851 INFO metastore.HiveMetaStore: 0: get_materialized_views_for_rewriting: db=@hive#db1
2024-09-17 19:47:56,852 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_materialized_views_for_rewriting: db=@hive#db1
2024-09-17 19:47:56,859 INFO metastore.HiveMetaStore: 0: get_materialized_views_for_rewriting: db=@hive#default
2024-09-17 19:47:56,859 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_materialized_views_for_rewriting: db=@hive#default
2024-09-17 19:47:56,888 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-17 19:47:56,888 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-17 19:47:56,888 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-17 19:47:56,889 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive._dummy_database._dummy_table
2024-09-17 19:47:56,891 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive._dummy_database._dummy_table
2024-09-17 19:47:56,892 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-17 19:47:56,892 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-17 19:47:56,895 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-17 19:47:56,895 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.stud
2024-09-17 19:47:56,895 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.stud
2024-09-17 19:47:56,905 INFO ql.Context: New scratch dir is hdfs://localhost:9000/tmp/hive/ADMIN/c3ff3761-e094-4ec4-829c-1d0683980b36/hive_2024-09-17_19-47-55_450_4227153324653473524-1
2024-09-17 19:47:56,913 INFO common.FileUtils: Creating directory if it doesn't exist: hdfs://localhost:9000/user/hive/warehouse/db1.db/stud/.hive-staging_hive_2024-09-17_19-47-55_450_4227153324653473524-1
2024-09-17 19:47:56,929 INFO metastore.HiveMetaStore: 0: get_not_null_constraints : tbl=hive.db1.stud
2024-09-17 19:47:56,930 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_not null constraints : tbl=hive.db1.stud
```

Query your data: Use SQL-like queries to retrieve data from your table:
SELECT * from stud;

```
Administrator: Command Prompt - hive
hive> select * from stud;
2024-09-17 19:49:45,653 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:49:45,654 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 19:49:45,654 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917194945_0e20cd6b-cedb-4f5e-9131-ec7efela1662): select * from stud
2024-09-17 19:49:45,664 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:49:45,664 INFO parse.CalcitePlanner: Starting Semantic Analysis
2024-09-17 19:49:45,664 INFO parse.CalcitePlanner: Completed phase 1 of Semantic Analysis
2024-09-17 19:49:45,665 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-17 19:49:45,665 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.stud
2024-09-17 19:49:45,665 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.stud
2024-09-17 19:49:45,672 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-17 19:49:45,672 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-17 19:49:45,692 INFO ql.Context: New scratch dir is hdfs://localhost:9000/tmp/hive/ADMIN/c3ff3761-e094-4ec4-829c-1d0683980b36/hive_2024-09-17_19-49-45_663_620
2024-09-17 19:49:45,692 INFO parse.CalcitePlanner: Completed getting MetaData in Semantic Analysis
2024-09-17 19:49:45,696 INFO results.QueryResultsCache: Initializing query results cache at /tmp/hive/_resultscache_
2024-09-17 19:49:45,702 INFO results.QueryResultsCache: Query results cache: cacheDirectory /tmp/hive/_resultscache_/results-0abc383f-c071-4adf-a03d-62c102c023d3, maxEntryLifetime 3600000
2024-09-17 19:49:45,705 INFO metastore.HiveMetaStore: 0: get_not_null_constraints : tbl=hive.db1.stud
2024-09-17 19:49:45,706 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_not_null_constraints : tbl=hive.db1.stud
2024-09-17 19:49:45,707 INFO metastore.HiveMetaStore: 0: get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:49:45,707 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:49:45,708 INFO metastore.HiveMetaStore: 0: get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:49:45,709 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:49:45,709 INFO metastore.HiveMetaStore: 0: get_unique_constraints : tbl=hive.db1.stud
2024-09-17 19:49:45,710 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_unique_constraints : tbl=hive.db1.stud
```

```
Administrator: Command Prompt - hive
2024-09-17 19:49:45,810 INFO exec.ListSinkOperator: RECORDS_OUT_INTERMEDIATE:0, RECORDS_OUT_OPERATOR_LIST_SINK_3:4,
1      Madhu
2      Mitha
3      Kannan
4      Deepa
Time taken: 0.138 seconds, Fetched: 4 row(s)
2024-09-17 19:49:45,819 INFO CliDriver: Time taken: 0.138 seconds, Fetched: 4 row(s)
```

TO DESCRIBE THE TABLE:
DESC stud;

```
Select Administrator: Command Prompt - hive
hive> desc stud;
2024-09-17 19:49:54,950 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:49:54,950 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 19:49:54,951 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917194954_61ff6252-f48d-4430-ae01-f66483d8ee54): desc stud
2024-09-17 19:49:54,962 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:49:54,964 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.stud
2024-09-17 19:49:54,964 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.stud
2024-09-17 19:49:54,976 INFO parse.DDLSemanticAnalyzer: analyzeDescribeTable done
2024-09-17 19:49:54,976 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-17 19:49:54,977 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:[FieldSchema(name:col_name, type:string, comment:from deserializer), FieldSchema(name:comment, type:string, comment:from deserializer)], properties:null)
2024-09-17 19:49:54,977 INFO exec.ListSinkOperator: Initializing operator LIST_SINK[0]
2024-09-17 19:49:54,978 INFO ql.Driver: Completed compiling command(queryId=ADMIN_20240917194954_61ff6252-f48d-4430-ae01-f66483d8ee54); Time taken: 0.026 seconds
2024-09-17 19:49:54,979 INFO reexec.ReExecDriver: Execution #1 of query
2024-09-17 19:49:54,980 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:49:54,980 INFO ql.Driver: Executing command(queryId=ADMIN_20240917194954_61ff6252-f48d-4430-ae01-f66483d8ee54): desc stud
2024-09-17 19:49:54,981 INFO ql.Driver: Starting task [Stage-0:DDL] in serial mode
2024-09-17 19:49:54,981 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.stud
2024-09-17 19:49:54,981 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.stud
2024-09-17 19:49:54,991 INFO ql.Driver: Completed executing command(queryId=ADMIN_20240917194954_61ff6252-f48d-4430-ae01-f66483d8ee54); Time taken: 0.011 seconds
OK
2024-09-17 19:49:54,992 INFO ql.Driver: OK
2024-09-17 19:49:54,993 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:49:54,995 INFO mapred.FileInputFormat: Total input files to process : 1
2024-09-17 19:49:55,008 INFO exec.ListSinkOperator: RECORDS_OUT_INTERMEDIATE:0, RECORDS_OUT_OPERATOR_LIST_SINK_0:2,
id int
name string
Time taken: 0.043 seconds, Fetched: 2 row(s)
2024-09-17 19:49:55,011 INFO CliDriver: Time taken: 0.043 seconds, Fetched: 2 row(s)
2024-09-17 19:49:55,011 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:49:55,012 INFO session.SessionState: Resetting thread name to main
hive> alter table stud add columns(age int);
2024-09-17 19:49:55,012 INFO session.SessionState: Resetting thread name to main
```

To alter table:

ALTER TABLE stud ADD COLUMNS(age int);

```
Select Administrator: Command Prompt - hive
hive> alter table stud add columns(age int);
2024-09-17 19:50:27,083 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:50:27,083 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 19:50:27,084 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917195027_39a69b3a-1878-495c-89fa-567c73e43675): alter table stud add columns(age
2024-09-17 19:50:27,094 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:50:27,096 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.stud
2024-09-17 19:50:27,097 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.stud
2024-09-17 19:50:27,102 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-17 19:50:27,102 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:null, properties:null)
2024-09-17 19:50:27,103 INFO ql.Driver: Completed compiling command(queryId=ADMIN_20240917195027_39a69b3a-1878-495c-89fa-567c73e43675); Time taken: 0.019 seconds
2024-09-17 19:50:27,103 INFO reexec.ReExecDriver: Execution #1 of query
2024-09-17 19:50:27,104 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:50:27,104 INFO ql.Driver: Executing command(queryId=ADMIN_20240917195027_39a69b3a-1878-495c-89fa-567c73e43675): alter table stud add columns(age
2024-09-17 19:50:27,105 INFO ql.Driver: Starting task [Stage-0:DDL] in serial mode
2024-09-17 19:50:27,105 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.stud
2024-09-17 19:50:27,105 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.stud
2024-09-17 19:50:27,115 INFO metastore.HiveMetaStore: 0: alter_table : hive.db1.stud newtbl=stud
2024-09-17 19:50:27,115 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=alter_table : hive.db1.stud newtbl=stud
2024-09-17 19:50:27,159 INFO ql.Driver: Completed executing command(queryId=ADMIN_20240917195027_39a69b3a-1878-495c-89fa-567c73e43675); Time taken: 0.054 seconds
OK
2024-09-17 19:50:27,160 INFO ql.Driver: OK
```

To create views:

CREATE VIEW V1 AS select id,name from stud;

Select * from v1;


```
Administrator: Command Prompt - hive
2024-09-17 19:50:41,300 INFO session.SessionState: Resetting thread name to main
hive> create view v1 as select id,name from stud where name like '%m';
2024-09-17 19:51:30,318 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:51:30,318 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 19:51:30,319 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917195130_f64b5e5f-4ca1-496c-9c6b-1c16c85214f2): create view v1 as select id,name
2024-09-17 19:51:30,330 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:51:30,330 INFO parse.CalcitePlanner: Starting Semantic Analysis
2024-09-17 19:51:30,331 INFO parse.CalcitePlanner: Creating view db1.v1 position=12
2024-09-17 19:51:30,332 INFO metastore.HiveMetaStore: 0: get_database: @hive#db1
2024-09-17 19:51:30,332 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_database: @hive#db1
2024-09-17 19:51:30,334 INFO parse.CalcitePlanner: Completed phase 1 of Semantic Analysis
2024-09-17 19:51:30,334 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-17 19:51:30,334 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.stud
2024-09-17 19:51:30,335 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.stud
2024-09-17 19:51:30,341 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-17 19:51:30,341 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-17 19:51:30,363 INFO ql.Context: New scratch dir is hdfs://localhost:9000/tmp/hive/ADMIN/c3ff3761-e094-4ec4-829c-1d0683980b36/hive_2024-09-17_19-51-30
2024-09-17 19:51:30,363 INFO parse.CalcitePlanner: Completed getting MetaData in Semantic Analysis
2024-09-17 19:51:30,365 INFO metastore.HiveMetaStore: 0: get_not_null_constraints : tbl=hive.db1.stud
2024-09-17 19:51:30,366 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_not_null_constraints : tbl=hive.db1.stud
2024-09-17 19:51:30,367 INFO metastore.HiveMetaStore: 0: get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:51:30,367 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:51:30,368 INFO metastore.HiveMetaStore: 0: get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:51:30,369 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:51:30,373 INFO metastore.HiveMetaStore: 0: get_unique_constraints : tbl=hive.db1.stud
2024-09-17 19:51:30,373 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_unique_constraints : tbl=hive.db1.stud
2024-09-17 19:51:30,374 INFO metastore.HiveMetaStore: 0: get_foreign_keys : parentdb=null parenttbl=null foreigndb=db1 foreigntbl=stud
2024-09-17 19:51:30,375 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_foreign_keys : parentdb=null parenttbl=null foreigndb=db1 foreigntbl=stud
2024-09-17 19:51:30,416 INFO metastore.HiveMetaStore: 0: get_databases: @hive#
2024-09-17 19:51:30,417 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_databases: @hive#
2024-09-17 19:51:30,418 INFO metastore.HiveMetaStore: 0: get_materialized_views_for_rewriting: db=@hive#db1
2024-09-17 19:51:30,418 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_materialized_views_for_rewriting: db=@hive#db1
2024-09-17 19:51:30,420 INFO metastore.HiveMetaStore: 0: get_materialized_views_for_rewriting: db=@hive#default
2024-09-17 19:51:30,421 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get materialized views for rewriting: db=@hive#default

Administrator: Command Prompt - hive
hive> select * from v1;
2024-09-17 19:52:34,300 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 19:52:34,300 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 19:52:34,301 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917195234_4d5d24c1-8d32-456b-bdb4-081ede02a6ec): select * from v1
2024-09-17 19:52:34,310 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 19:52:34,311 INFO parse.CalcitePlanner: Starting Semantic Analysis
2024-09-17 19:52:34,311 INFO parse.CalcitePlanner: Completed phase 1 of Semantic Analysis
2024-09-17 19:52:34,311 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-17 19:52:34,312 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.v1
2024-09-17 19:52:34,312 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.v1
2024-09-17 19:52:34,322 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-17 19:52:34,322 INFO parse.CalcitePlanner: Get metadata for source tables
2024-09-17 19:52:34,323 INFO metastore.HiveMetaStore: 0: get_table : tbl=hive.db1.stud
2024-09-17 19:52:34,323 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_table : tbl=hive.db1.stud
2024-09-17 19:52:34,332 INFO parse.CalcitePlanner: Get metadata for subqueries
2024-09-17 19:52:34,332 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-17 19:52:34,333 INFO parse.CalcitePlanner: Get metadata for destination tables
2024-09-17 19:52:34,345 INFO ql.Context: New scratch dir is hdfs://localhost:9000/tmp/hive/ADMIN/c3ff3761-e094-4ec4-829c-1d0683980b36/hive_2024-09-17_19-52-34
2024-09-17 19:52:34,345 INFO parse.CalcitePlanner: Completed getting MetaData in Semantic Analysis
2024-09-17 19:52:34,347 INFO metastore.HiveMetaStore: 0: get_not_null_constraints : tbl=hive.db1.stud
2024-09-17 19:52:34,347 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_not_null_constraints : tbl=hive.db1.stud
2024-09-17 19:52:34,348 INFO metastore.HiveMetaStore: 0: get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:52:34,349 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:52:34,353 INFO metastore.HiveMetaStore: 0: get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:52:34,353 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_primary_keys : tbl=hive.db1.stud
2024-09-17 19:52:34,354 INFO metastore.HiveMetaStore: 0: get_unique_constraints : tbl=hive.db1.stud
2024-09-17 19:52:34,354 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_unique_constraints : tbl=hive.db1.stud
2024-09-17 19:52:34,355 INFO metastore.HiveMetaStore: 0: get_foreign_keys : parentdb=null parenttbl=null foreigndb=db1 foreigntbl=stud
```

List Hive Tables and Data:

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

SHOW TABLES;

```
Administrator: Command Prompt - hive
> show tables;
2024-09-17 20:15:52,744 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 20:15:52,744 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 20:15:52,745 INFO ql.Driver: Compiling command(queryId=ADMIN_20240917201552_671de9e3-1734-4160-a345-d26c53643535): show tables
2024-09-17 20:15:52,756 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 20:15:52,756 INFO metastore.HiveMetaStore: 0: get_database: @hive#db1
2024-09-17 20:15:52,757 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_database: @hive#db1
2024-09-17 20:15:52,760 INFO ql.Driver: Semantic Analysis Completed (retrial = false)
2024-09-17 20:15:52,761 INFO ql.Driver: Returning Hive schema: Schema(fieldSchemas:[FieldSchema(name:tab_name, type:string, comment:from de
2024-09-17 20:15:52,761 INFO exec.ListSinkOperator: Initializing operator LIST_SINK[0]
2024-09-17 20:15:52,762 INFO ql.Driver: Completed compiling command(queryId=ADMIN_20240917201552_671de9e3-1734-4160-a345-d26c53643535); Tim
2024-09-17 20:15:52,762 INFO reexec.ReExecDriver: Execution #1 of query
2024-09-17 20:15:52,762 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 20:15:52,762 INFO ql.Driver: Executing command(queryId=ADMIN_20240917201552_671de9e3-1734-4160-a345-d26c53643535): show tables
2024-09-17 20:15:52,763 INFO ql.Driver: Starting task [Stage-0:DDL] in serial mode
2024-09-17 20:15:52,765 INFO metastore.HiveMetaStore: 0: get_database: @hive#db1
2024-09-17 20:15:52,766 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_database: @hive#db1
2024-09-17 20:15:52,767 INFO metastore.HiveMetaStore: 0: get_tables: db=@hive#db1 pat=.*
2024-09-17 20:15:52,768 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=get_tables: db=@hive#db1 pat=.*
2024-09-17 20:15:52,771 INFO ql.Driver: Completed executing command(queryId=ADMIN_20240917201552_671de9e3-1734-4160-a345-d26c53643535); Tim
JK
2024-09-17 20:15:52,772 INFO ql.Driver: OK
2024-09-17 20:15:52,772 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
2024-09-17 20:15:52,774 INFO mapred.FileInputFormat: Total input files to process : 1
2024-09-17 20:15:52,788 INFO exec.ListSinkOperator: RECORDS_OUT_INTERMEDIATE:0, RECORDS_OUT_OPERATOR_LIST_SINK_0:2,
stud
/1
Time taken: 0.028 seconds, Fetched: 2 row(s)
2024-09-17 20:15:52,790 INFO CliDriver: Time taken: 0.028 seconds, Fetched: 2 row(s)
2024-09-17 20:15:52,791 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 20:15:52,791 INFO session.SessionState: Resetting thread name to main
```

Quit Hive: To exit the Hive CLI, simply type:
Quit;

```
Administrator: Command Prompt
2024-09-17 20:16:54,639 INFO session.SessionState: Resetting thread name to main
hive> quit;
2024-09-17 20:17:01,582 INFO conf.HiveConf: Using the default value passed in for log id: c3ff3761-e094-4ec4-829c-1d0683980b36
2024-09-17 20:17:01,583 INFO session.SessionState: Updating thread name to c3ff3761-e094-4ec4-829c-1d0683980b36 main
2024-09-17 20:17:01,594 INFO session.SessionState: Deleted directory: /tmp/hive/ADMIN/c3ff3761-e094-4ec4-829c-1d0683980b36 on fs with scheme hdfs
2024-09-17 20:17:01,594 INFO session.SessionState: Deleted directory: C:/Users/ADMIN/AppData/Local/Temp/ADMIN/c3ff3761-e094-4ec4-829c-1d0683980b36 on fs v
2024-09-17 20:17:01,601 INFO metastore.HiveMetaStore: 0: Cleaning up thread local RawStore...
2024-09-17 20:17:01,603 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=Cleaning up thread local RawStore...
2024-09-17 20:17:01,603 INFO metastore.HiveMetaStore: 0: Done cleaning up thread local RawStore
2024-09-17 20:17:01,603 INFO HiveMetaStore.audit: ugi=ADMIN ip=unknown-ip-addr cmd=Done cleaning up thread local RawStore
D:\apache-hive-3.1.3-bin\bin>
```

RESULT:

Thus, to create tables in Hive and write queries to access the data in the table was completed successfully.