EX.NO.5 210701701

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

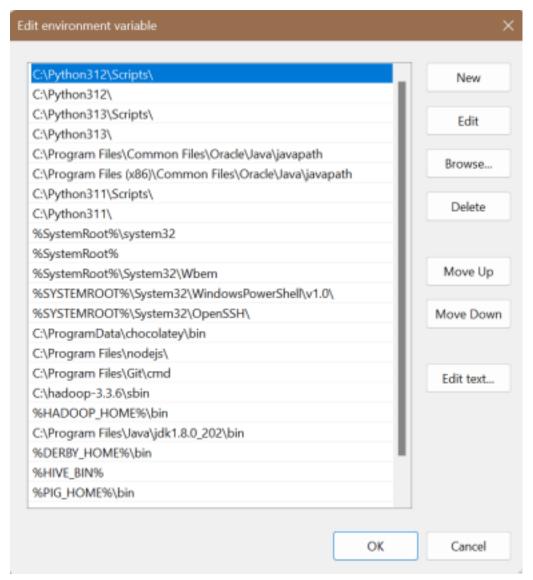
https://db.apache.org/derby/derby_downloads.html#For+Java+8+and+Higher

2. Downloading Apache Hive binaries

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

3. Setting environment variables

Variable	Value
HADOOP_HOME	C:\hadoop-3.3.6
HIVE_BIN	%HIVE_HOME%\bin
HIVE_HOME	C:\apache-hive-3.1.3-bin
HIVE_LIB	%HIVE_HOME%\lib
DERBY_HOME	C:\db-derby-10.14.2.0-bin EX.NO.5 210701157



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://ldrv.ms/f/s!ArSg3Xpur4Grmw0SDqW0g44T7HYU?e=wDsoBn

4. Starting Hadoop Services

start-all.cmd **EX.NO.5 210701157**

- 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:

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/mercy/OneDrive/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;

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

SELECT * FROM students;

OUTPUT:

```
Notice
140: Clear path contains multiple $4/40 bindings.
140: Clear path contains multiple $4/40 bindings.
140: Paund binding in [jar:flie:/K:/hadour-1.3.4/shara/hadour/common/lib/s2f4j-releaskj-1.7.36-jar1/org/s1f4j/impl/StatistoggerSinder.class)
140: See Pathy://www.statistoggerSinder.class]
140: Set Statist Sinding is ef type [erg.s1f4].impl.statistoggerFathyr)
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140: See Statist Statistogles Commonwealthyrian file file:/K:/apache-hdve-3.1.3-bin/conf/hdve-site.xel
140: See Statist Statistogles Statist Statis Statist Statist Statist Statist Statist Statist Statist Statist
  reging inditalized using configuration in jer:file:/C:/apache-bive-3.1.3-bin/150/bive-common-3.1.3.jer/bive-logiji.properties Async: true
181-88-20 20:0138,403 1900 Semiconizate:
loging inditalized using configuration in jer:file:/C:/apache-bive-3.1.3-bin/150/bive-common-3.1.3.jer/bive-logiji.properties Async: true
181-88-20 20:0138,403 1900 Semiconizate: in jer:file:/C:/apache-bive-3.1.3-bin/150/bive-common-3.1.3.jer/bive-logiji.properties Async: true
181-88-20 20:0138,803 1900 Semicon Semiconizate: Created MCPS directory: /bsp/dom/memon/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/150/dom/1
 Due: Seem DATABASES;
804-08-35 30-93-54,000 IMPO conf.HiveConf: Using the default value passed in for log 3d: Scibbs57-7567-446e-9005-c5304c956339
804-08-35 20-93-54,000 IMPO qi.Driver: Compiling command(queryImmery_30300018300159_6197584F-418e-4500-5007-95404c164051): Debt DATABASES
804-08-35 30-93-54,000 IMPO qi.Driver: Computersy soom is disabled, not creating a lock manager
804-08-35 30-93-54,000 IMPO qi.Driver: Sementic Analysis Completed (retrial = false)
804-08-35 30-93-54,000 IMPO qi.Driver: Sementic Analysis Completed (retrial = false)
804-08-35 30-93-54,000 IMPO qi.Driver: Seturning Mive schema: Schema(fieldSchema: [FieldSchema(name:database_name, type:string, comment:from descrializer)], properties
  )
Sel-08-25 20-01-56,820 DMTO enec.ListSinkOperator: Initializing operator LEST_SIN([8])
S04-08-26 20-01-56,800 DMTO enec.ListSinkOperator: Initializing operator LEST_SIN([8])
S04-08-26 20-01-58,800 DMTO qi.Driver: Compileted compiling communi(query)Idemory_20038818200150_04775644-aik0-4500-5007-954544144801); Time taken: 0.77 seconds
S04-08-26 20-01-58,801 DMTO qi.Driver: Concurrency mode is disabled, not creating a lock manager
S04-08-26 20-01-58,800 DMTO qi.Driver: Executing communi(query)Idemory_20038818200150_04775647-aik0-4500-5007-954544144801): DMM GATABASES
S04-08-26 20-01-58,801 DMTO qi.Driver: Starting takk (Stage-0.001; in serial mode
S04-08-26 20-01-58,801 DMTO metastron-LiveristSorter: 0 gatabases: 0 minget_databases: S04-08-26 20-01-58,801 DMTO Metastron-LiveristSorter: 0 gatabases: 0 gatabases: 0 minget_databases: S04-08-26 20-01-58,801 DMTO Metastron-LiveristSorter: 0 gatabases: 0 gatabases: 0 minget_databases: 0 gatabases: 0 ga
  804-08-26 20-02-56,870 IMFO exec.DBLTask: remults : 2
804-08-26 20-02-56,870 IMFO ql.Driver: Completed scenariog command(query)domercy_20038828280200_0477844F-4160-6000-6647-935244164832); Time taken: 0.863 seconds
 824-08-25 20-01-98,909 IMTO q1.Driver: OX
824-08-25 20-01-98,900 IMTO q1.Driver: Concurrency mode is disabled, not creating a lock manager
824-08-26 20-01-98,900 IMTO q1.Driver: Concurrency mode is disabled, not creating a lock manager
824-08-26 20-021-98,900 IMTO magned Publishopstformat: Total Quart files are process: 1
824-08-26 20-021-98,900 IMTO magned Publishopstformat: Total Quart files are process: 1
824-08-26 20-021-98,900 IMTO magned Publishopstformatic Total Quart files are process: 0.1
824-08-26 20-021-98,900 IMTO magned Publishopstformatic Total Quart files are process: 0.1
824-08-26 20-021-98,900 IMTO magned Publishopstformatic Total Quart files are process: 0.1
     repla

The taben: 8.842 seconds, Petched: 2 row(s)

Bi-G8-18 20:01:51,000 IMFO CHIDTIUMT: Time taken: 8.842 seconds, Fatched: 2 row(s)

104-68-18 20:02:51,000 IMFO conf.frivorOff: Uning the defeult value peaced in for log 3d: 6cbb3c57-f547-4a6e-9925-c6204-956239

104-68-28 28:02:13,000 IMFO session.tessionState: Resetting thread name to main
#804-08-35 28:85:50,795 3890 coef.wivecowf: using the default value passed in for log 32: 6c8b3c97-f667-4a6e-9839-c8394c95629
8804-08-36 38:85:50,795 3890 session.SessionState: Updating thread name to 6c8b3c97-f667-4a6e-9935-c8394c95629 main
8804-08-36 28:85:50,799 3890 gl.Oriver: Compiling communicatory_Noverny_NoveEc808959_No49635-de58-4a98-6629-6948555350); USE sample
 804-08-36 38:85:59,838 3990 ql.Oriver: Concurrency mode is disabled, not creating a lock manager
804-08-36 39:85:59,839 3990 metastore disabletaStore: 9: get_detabase: @tisablemcie
804-08-38 28:85:19,821 3990 misebetaStore.audit: ugismercy (produces-ip-addr-ceduget_0
                                                                                                                                                                                                                                                                                                                                                                                                                                     cmd-get_dutubase: @hiveMsample
 804-08-25 20:95-59,852 3090 qi.Driver: Starting tesk (Stager&:00), in serial mode
804-08-28 20:08:10,883 300 exceptions-skiedetasture: 0: get_catalase: (bisetase).
804-08-25 20:85:39,855 300 disebtasture: audit ugd-mercy (powerhor-lp-ddr
                                                                                                                                                                                                                                                                                                                                                                                                                                          cmd-get_database: @hive#sample
cmd-get_dutabase: @hive#uample
  824-08-26 20:05:59,865 30F3 ql.Driver: Completed executing community.com/stancery_20248636209559_564F023-6656-4436-6429-0F64877623Te); Time taken: 0.813 seconds
 C
Sch-GB-18 28:85:50,864 DBFO gl.Driver: OR
Sch-GB-18 28:85:50,864 DBFO gl.Driver: Orcorrency mode is disabled, not creating a lock manager
Sch-GB-18 28:85:50,865 DBFO gl.Driver: Concurrency mode is disabled, not creating a lock manager
Sch-GB-18 28:85:50,865 DBFO gl.Driver: These taken: 0.865 seconds
Sch-GB-18 28:85:50,865 DBFO gention.Secondsrate: Scheduler value passed in for log id: SchOut57:4567-4a6a:9015:05154055239
Sch-GB-18 28:85:50,865 DBFO gention.Secondsrate: Schout57:4567-4a6a:9015:05154055239
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EN-40-16 20:10-08,000 NAME PRODUCTION. Sendon State: NETHOTORE_FOLTER_NOW will be ignored, since hive.security.authorisation.marager is set to instance of Hivahuthorisations: 150-16 Name 100 N
            104-08-36 30:00:08,807 DBFO ql.Ordver: Sementic Avalysis Completed (retrial = false)
104-08-36 30:00:08,807 DBFO ql.Ordver: Returning time scheme: Scheme(rialESchemes:roll)
104-08-36 30:10:08,807 DBFO ql.Ordver: Returning time scheme: Scheme(rialESchemes:roll)
104-08-36 30:10:08,807 DBFO ql.Ordver: Completed scampling scammand(queryIdenmenty_2000082000088_3488479-9070-4870-9850-9877038200); Time taken: 0.38 seconds
104-08-36 30:10:08,807 DBFO ql.Ordver: Execution to of query
104-08-36 30:10:08,807 DBFO ql.Ordver: Execution; scammand(queryIdenmenty_2000082000088_3488479-9070-4870-9850-955770382700); CREATE TABLE students (name STRIMO, rull INT,
                     04-08-05 20:10-09,739 DBFO ql.Oriver: OK

04-08-20 20:10-09,730 DBFO ql.Oriver: Concurrency mode is disabled, not creating a lock manager

as taken: 0.900 seconds

04-08-20 30:10-09,722 DBFO ClSOriver: Time taken: 0.903 seconds

04-08-26 20:10-09,723 DBFO coef.miveCorf: Uning the default value passed in for log id: 0:800:05-fbC7-tabe-9919-08260

04-08-26 20:10-09,723 DBFO section.SectionSection Resetting thread name to main
EX.NO.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    210701157
```

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```
Note Of Chi Table 5:

Chicago 1: 20:40 mg, 127 3000 conf. divident; Uning the enfault value passed in for lag id: decision-field-rate-MECS-calculated State 1:

Chicago 1: 20:40 mg, 10:20 3000 contains Destinolists: Spatial times are to Echicago 1: 1500 contains State 1: 1500
```

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08-26 20:41:12,644 INFO session.SessionState: Updating thread name to Schblc57-f5d7-4a6a-9925-c62b4c956239 main 
08-26 20:41:12,645 INFO ql.Driver: Compiling command(querytdumercy_20240026204112_4667657c-De35-400c-9a40-f9a19709922d): SELECT * 
08-26 20:41:12,665 INFO ql.Driver: Concurrency mode is disabled, not creating a lock manager 
08-26 20:41:12,663 INFO parse.CalcitePlanner: Starting Semantic Analysis 
08-26 20:41:12,651 INFO parse.CalcitePlanner: Completed phase 1 of Semantic Analysis 
08-26 20:41:12,651 INFO parse.CalcitePlanner: Completed phase 1 of Semantic Analysis
                 26 28:41:12,691 INFO parse.CalcitePlanner: Get metadata for source tables
26 28:41:12,691 INFO metastore.HiveMetaStore: 8: get_table : tbl:hive.sample.students
        -03-26 10:41:14,144 IMFO ql.Driver: OK
-68-26 20:41:14,145 IMFO ql.Driver: Concurrency mode is disabled, not creating a lock manager
         -08-26 20:41:14,160 IMPO mapred.FileInputFormat: Total input files to process: 1
-08-26 29:41:14,288 IMPO lazy.LazyStruct: Missing fields! Expected 3 fields but only got 1! Ignoring similar problems.
-08-26 20:41:14,291 IMPO exec.TableScanOperator: RECORDS_OUT_INTERMEDIATE:0, RECORDS_OUT_OPERATOR_TS_0:10,
-08-26 20:41:14,291 IMPO exec.SelectOperator: RECORDS_OUT_INTERMEDIATE:0, RECORDS_OUT_OPERATOR_SEL_1:10,
-08-26 20:41:14,291 IMPO exec.ListSinkOperator: RECORDS_OUT_INTERMEDIATE:0, RECORDS_OUT_OPERATOR_SEL_1:10,
hishek,110,CSE
ragya,126,CSE WULL
          ,157,CSE NULL NULL
taken: 1.5 seconds, Fetched: 10 row(s)
68-26 20:41:14,321 IMFO CliDriver: Yime taken: 1.5 seconds, Fetched: 10 row(s)
68-26 20:41:14,321 IMFO conf.HiveConf: Using the default value passed in for log id: 6cbblc57-f5d7-4a6e-9925-c62b4c956239
68-26 20:41:14,322 IMFO session.SessionState: Resetting thread name to main
```

RESULT:

Thus a table has been created in Hive and writing queries to access the data in the table is completed successfully.