Apache Derby provides you tools such as **sysinfo, ij** and, **dblook**.

sysinfo tool

Using this tool, you can get information about Java and Derby environment.

Browse through the bin folder of Derby installation directory and execute the sysinfo command as shown below −

C:\Users\MY\_USER>cd %DERBY\_HOME%/bin

C:\Derby\bin>sysinfo

On executing, it gives you system information about java and derby as given below −

------------------ Java Information ------------------

Java Version: 1.8.0\_101

Java Vendor: Oracle Corporation

Java home: C:\Program Files\Java\jdk1.8.0\_101\jre

Java classpath: C:\Users\Tutorialspoint\Google

Drive\Office\Derby\derby\_zip\New folder\db-derby-10.12.1.1-

bin\lib;C:\EXAMPLES\_\Task\jars\\*;C:\EXAMPLES\jars\mysql-connector-java-5.1.40-

bin.jar;C:\Users\Tutorialspoint\Google Drive\Office\37.Junit

Update\jars;C:\Program Files\Apache Software Foundation\Tomcat

8.5\lib\\*;C:\Derby\lib\derby.jar;C:\Derby\lib\derbyclient.jar;C:\Derby\lib\derb

yLocale\_cs.jar;C:\Derby\lib\derbyLocale\_de\_DE.jar;C:\Derby\lib\derbyLocale\_es.j

ar;C:\Derby\lib\derbyLocale\_fr.jar;C:\Derby\lib\derbyLocale\_hu.jar;C:\Derby\lib

\derbyLocale\_it.jar;C:\Derby\lib\derbyLocale\_ja\_JP.jar;C:\Derby\lib\derbyLocale

\_ko\_KR.jar;C:\Derby\lib\derbyLocale\_pl.jar;C:\Derby\lib\derbyLocale\_pt\_BR.jar;C

:\Derby\lib\derbyLocale\_ru.jar;C:\Derby\lib\derbyLocale\_zh\_CN.jar;C:\Derby\lib\

derbyLocale\_zh\_TW.jar;C:\Derby\lib\derbynet.jar;C:\Derby\lib\derbyoptionaltools

.jar;C:\Derby\lib\derbyrun.jar;C:\Derby\lib\derbytools.jar;;C:\Derby/lib/derby.

jar;C:\Derby/lib/derbynet.jar;C:\Derby/lib/derbyclient.jar;C:\Derby/lib/derbyto

ols.jar;C:\Derby/lib/derbyoptionaltools.jar

OS name: Windows 10

OS architecture: amd64

OS version: 10.0

Java user name: Tutorialspoint

Java user home: C:\Users\Tutorialspoint

Java user dir: C:\Derby\bin

java.specification.name: Java Platform API Specification

java.specification.version: 1.8

java.runtime.version: 1.8.0\_101-b13

--------- Derby Information --------

[C:\Derby\lib\derby.jar] 10.14.2.0 - (1828579)

[C:\Derby\lib\derbytools.jar] 10.14.2.0 - (1828579)

[C:\Derby\lib\derbynet.jar] 10.14.2.0 - (1828579)

[C:\Derby\lib\derbyclient.jar] 10.14.2.0 - (1828579)

[C:\Derby\lib\derbyoptionaltools.jar] 10.14.2.0 - (1828579)

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----------------- Locale Information -----------------

Current Locale : [English/United States [en\_US]]

Found support for locale: [cs]

version: 10.14.2.0 - (1828579)

Found support for locale: [de\_DE]

version: 10.14.2.0 - (1828579)

Found support for locale: [es]

version: 10.14.2.0 - (1828579)

Found support for locale: [fr]

version: 10.14.2.0 - (1828579)

Found support for locale: [hu]

version: 10.14.2.0 - (1828579)

Found support for locale: [it]

version: 10.14.2.0 - (1828579)

Found support for locale: [ja\_JP]

version: 10.14.2.0 - (1828579)

Found support for locale: [ko\_KR]

version: 10.14.2.0 - (1828579)

Found support for locale: [pl]

version: 10.14.2.0 - (1828579)

Found support for locale: [pt\_BR]

version: 10.14.2.0 - (1828579)

Found support for locale: [ru]

version: 10.14.2.0 - (1828579)

Found support for locale: [zh\_CN]

version: 10.14.2.0 - (1828579)

Found support for locale: [zh\_TW]

version: 10.14.2.0 - (1828579)

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ijtool

Using this tool, you can run scripts and queries of apache Derby.

Browse through the bin folder of Derby installation directory and execute the ij command as shown below −

C:\Users\MY\_USER>cd %DERBY\_HOME%/bin

C:\Derby\bin>ij

This will give you **ij shell** where you can execute derby command and scripts, as shown below −

ij version 10.14

ij>

Using **help** command, you can get the list of commands supported by this shell.

C:\Derby\bin>cd %DERBY\_HOME%/bin

C:\Derby\bin>ij

ij version 10.14

ij> help;

Supported commands include:

PROTOCOL 'JDBC protocol' [ AS ident ];

-- sets a default or named protocol

DRIVER 'class for driver'; -- loads the named class

CONNECT 'url for database' [ PROTOCOL namedProtocol ] [ AS connectionName ];

-- connects to database URL

-- and may assign identifier

SET CONNECTION connectionName; -- switches to the specified connection

SHOW CONNECTIONS; -- lists all connections

AUTOCOMMIT [ ON | OFF ]; -- sets autocommit mode for the connection

DISCONNECT [ CURRENT | connectionName | ALL ];

-- drop current, named, or all connections;

-- the default is CURRENT

SHOW SCHEMAS; -- lists all schemas in the current database

SHOW [ TABLES | VIEWS | PROCEDURES | FUNCTIONS | SYNONYMS ] { IN schema };

-- lists tables, views, procedures, functions or

synonyms

SHOW INDEXES { IN schema | FROM table };

-- lists indexes in a schema, or for a table

SHOW ROLES; -- lists all defined roles in the database,

sorted

SHOW ENABLED\_ROLES; -- lists the enabled roles for the current

-- connection (to see current role use

-- VALUES CURRENT\_ROLE), sorted

SHOW SETTABLE\_ROLES; -- lists the roles which can be set for the

-- current connection, sorted

DESCRIBE name; -- lists columns in the named table

COMMIT; -- commits the current transaction

ROLLBACK; -- rolls back the current transaction

PREPARE name AS 'SQL-J text'; -- prepares the SQL-J text

EXECUTE { name | 'SQL-J text' } [ USING { name | 'SQL-J text' } ] ;

-- executes the statement with parameter

-- values from the USING result set row

REMOVE name; -- removes the named previously prepared

statement

RUN 'filename'; -- run commands from the named file

ELAPSEDTIME [ ON | OFF ]; -- sets elapsed time mode for ij

MAXIMUMDISPLAYWIDTH integerValue;

-- sets the maximum display width for

-- each column to integerValue

ASYNC name 'SQL-J text'; -- run the command in another thread

WAIT FOR name; -- wait for result of ASYNC'd command

HOLDFORCONNECTION; -- sets holdability for a connection to HOLD

-- (i.e. ResultSet.HOLD\_CURSORS\_OVER\_COMMIT)

NOHOLDFORCONNECTION; -- sets holdability for a connection to NO HOLD

-- (i.e. ResultSet.CLOSE\_CURSORS\_AT\_COMMIT)

GET [SCROLL INSENSITIVE] [WITH { HOLD | NOHOLD }] CURSOR name AS 'SQL-J

query';

-- gets a cursor (JDBC result set) on the query

-- the default is a forward-only cursor with

holdability

NEXT name; -- gets the next row from the named cursor

FIRST name; -- gets the first row from the named scroll

cursor

LAST name; -- gets the last row from the named scroll

cursor

PREVIOUS name; -- gets the previous row from the named scroll

cursor

ABSOLUTE integer name; -- positions the named scroll cursor at the

absolute row number

-- (A negative number denotes position from the

last row.)

RELATIVE integer name; -- positions the named scroll cursor relative to

the current row

-- (integer is number of rows)

AFTER LAST name; -- positions the named scroll cursor after the

last row

BEFORE FIRST name; -- positions the named scroll cursor before the

first row

GETCURRENTROWNUMBER name; -- returns the row number for the current

position of the named scroll cursor

-- (0 is returned when the cursor is not

positioned on a row.)

CLOSE name; -- closes the named cursor

LOCALIZEDDISPLAY [ ON | OFF ];

-- controls locale sensitive data representation

EXIT; -- exits ij

HELP; -- shows this message

Any unrecognized commands are treated as potential SQL-J commands and executed

directly.

dblooktool

This tool is used to generate Data Definition Language.

Browse through the bin folder of Derby installation directory and execute the **dblook** command as shown below −

C:\Users\MY\_USER>cd %DERBY\_HOME%/bin

C:\Derby\bin>dblook -d myURL

Where, **myURL** is the connection URL of the database for which you need to generate DDL.