

APACHE SQOOP – IN-CLASS LAB 2

by

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Created Database and Table

```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
[cloudera@quickstart ~]$ mysql -u root -pcloudera  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 49  
Server version: 5.1.73 Source distribution  
  
Copyright (c) 2000, 2013, Oracle and/or its affiliates. All rights reserved.  
  
Oracle is a registered trademark of Oracle Corporation and/or its  
affiliates. Other names may be trademarks of their respective  
owners.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
mysql> use stocks_db  
Reading table information for completion of table and column names  
You can turn off this feature to get a quicker startup with -A  
  
Database changed  
mysql> CREATE TABLE Stocks(  
-> id INT NOT NULL PRIMARY KEY AUTO_INCREMENT,  
-> symbol VARCHAR(64) NOT NULL,  
-> name VARCHAR(64) NOT NULL,  
-> trade_date DATE,  
-> close_price DECIMAL(10,2),  
-> volume INT,  
-> updated_time TIMESTAMP DEFAULT CURRENT_TIMESTAMP);  
Query OK, 0 rows affected (0.28 sec)
```

Inserted data into Table

```
cloudera@quickstart
File Edit View Search Terminal Help

mysql> INSERT INTO Stocks
-> (symbol, name, trade_date, close_price, volume)
-> VALUES
-> ('AAL', 'American Airlines', '2015-11-11', 44.39, 4416900);
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> INSERT INTO Stocks
-> (symbol, name, trade_date, close_price, volume)
-> VALUES
-> ('AAPL', 'Apple', '2015-11-11', 116.1, 45217900);
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> INSERT INTO Stocks
-> (symbol, name, trade_date, close_price, volume)
-> VALUES
-> ('AMGN', 'Amgen', '2015-11-11', 156.0, 1923900);
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> INSERT INTO Stocks
-> (symbol, name, trade_date, close_price, volume)
-> VALUES
-> ('GARS', 'Garrison', '2015-11-11', 13.57, 24800);
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> INSERT INTO Stocks
-> (symbol, name, trade_date, close_price, volume)
-> VALUES
-> ('SBUX', 'Starbucks', '2015-11-11', 61.87, 4437300);
Query OK, 1 row affected (0.01 sec)
```

Selected all from Table

```
mysql> select * from Stocks;
```

id	symbol	name	trade_date	close_price	volume	update d_time
1	AAL	American Airlines	2015-11-11	44.39	4416900	2021-03-28 06:42:13
2	AAPL	Apple	2015-11-11	116.10	45217900	2021-03-28 06:42:13
3	AMGN	Amgen	2015-11-11	156.00	1923900	2021-03-28 06:42:13
4	GARS	Garrison	2015-11-11	13.57	24800	2021-03-28 06:42:28
5	SBUX	Starbucks	2015-11-11	61.87	4437300	2021-03-28 06:42:29
6	AAL	American Airlines	2015-11-12	42.40	4404500	2021-03-28 06:42:44
7	AAPL	Apple	2015-11-12	115.23	40217300	2021-03-28 06:42:44
8	MAT	Mattel	2015-11-11	24.04	2920100	2021-03-28 06:42:44
9	INTC	Intel	2015-11-11	32.86	19864700	2021-03-28 06:42:59

```
9 rows in set (0.00 sec)
```

Created and Listed Scoop job to do Incremental imports

SQOOP COMMAND:

- 1) `sqoop job --create Keerthyraaj -- import --connect jdbc:mysql://localhost/stocks_db --username root --password cloudera --table stocks --columns "symbol,name,volume" -m 7 --target-dir /BDAT1002/sqoop/keerthyraj --incremental append --check-column id`
- 2) `sqoop job --list`

```
[cloudera@quickstart ~]$ sqoop job --create Keerthyraaj -- import --connect jdbc:mysql://localhost/stocks_db --username root --password cloudera --table Stocks --columns "symbol,name,volume" -m 7 --target-dir /BDAT1002/sqoop/keerthyraj --incremental append --check-column id
```

```
Warning: /usr/lib/sqoop/./accumulo does not exist! Accumulo imports will fail.
```

```
Please set $ACCUMULO_HOME to the root of your Accumulo installation.
```

```
21/03/28 06:51:12 INFO sqoop.Sqoop: Running Sqoop version: 1.4.6-cdh5.13.0
```

```
21/03/28 06:51:16 WARN tool.BaseSqoopTool: Setting your password on the command-line is insecure. Consider using -P instead.
```

```
[cloudera@quickstart ~]$ sqoop job --list
```

```
Warning: /usr/lib/sqoop/./accumulo does not exist! Accumulo imports will fail.
```

```
Please set $ACCUMULO_HOME to the root of your Accumulo installation.
```

```
21/03/28 06:51:29 INFO sqoop.Sqoop: Running Sqoop version: 1.4.6-cdh5.13.0
```

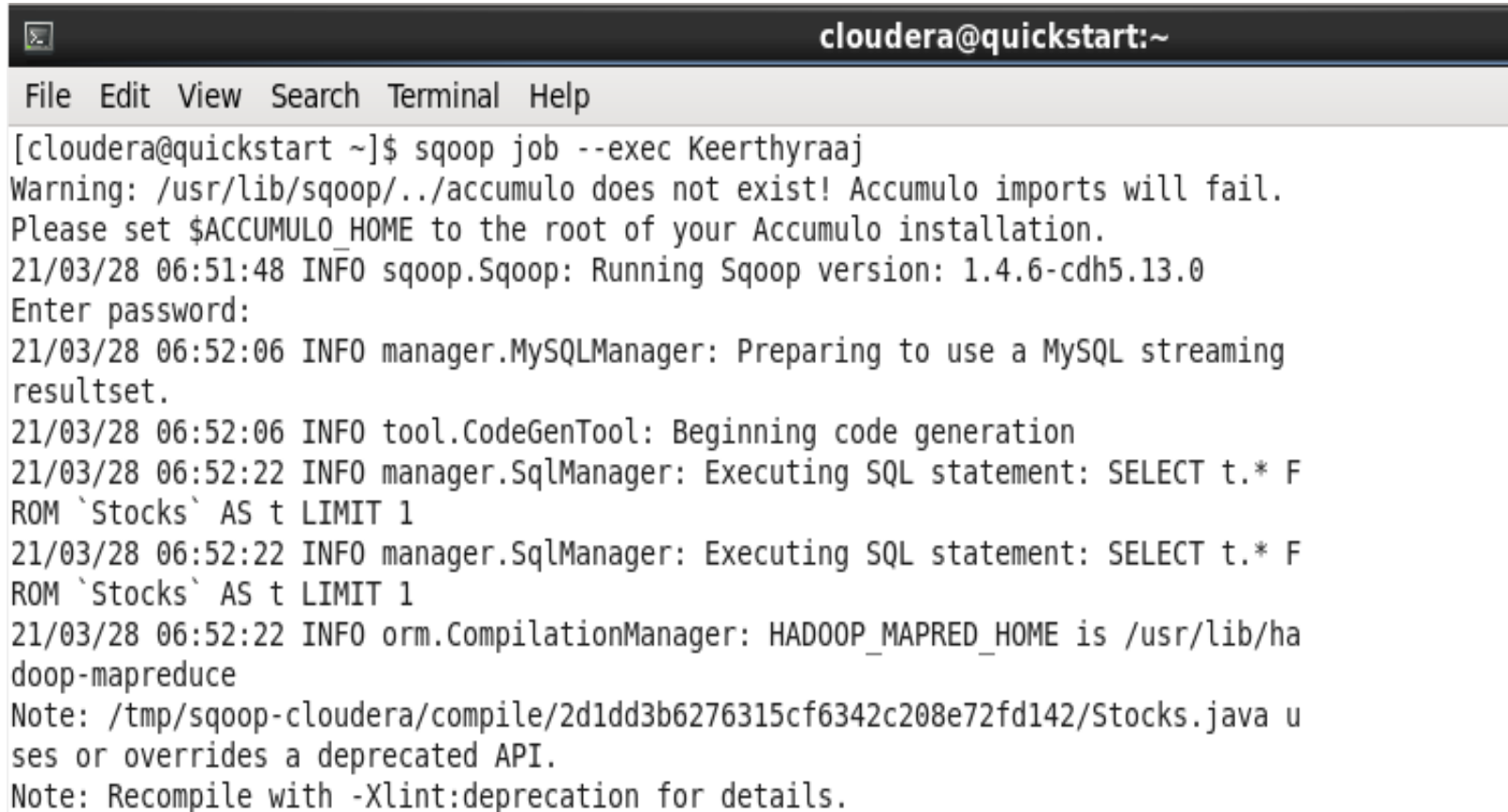
```
Available jobs:
```

```
Keerthyraaj
```

Executed Sqoop Job

SQOOP COMMAND:

3) `sqoop job --exec Keerthyraaj`

A terminal window titled 'cloudera@quickstart:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the execution of the command 'sqoop job --exec Keerthyraaj'. It displays a warning about the Accumulo installation, the Sqoop version (1.4.6-cdh5.13.0), and the password prompt. The output shows the preparation of a MySQL streaming resultset, the execution of a SQL statement (SELECT t.* FROM `Stocks` AS t LIMIT 1), and a note about a deprecated API. The terminal text is as follows:

```
cloudera@quickstart:~  
File Edit View Search Terminal Help  
[cloudera@quickstart ~]$ sqoop job --exec Keerthyraaj  
Warning: /usr/lib/sqoop/./accumulo does not exist! Accumulo imports will fail.  
Please set $ACCUMULO_HOME to the root of your Accumulo installation.  
21/03/28 06:51:48 INFO sqoop.Sqoop: Running Sqoop version: 1.4.6-cdh5.13.0  
Enter password:  
21/03/28 06:52:06 INFO manager.MySQLManager: Preparing to use a MySQL streaming  
resultset.  
21/03/28 06:52:06 INFO tool.CodeGenTool: Beginning code generation  
21/03/28 06:52:22 INFO manager.SqlManager: Executing SQL statement: SELECT t.* F  
ROM `Stocks` AS t LIMIT 1  
21/03/28 06:52:22 INFO manager.SqlManager: Executing SQL statement: SELECT t.* F  
ROM `Stocks` AS t LIMIT 1  
21/03/28 06:52:22 INFO orm.CompilationManager: HADOOP_MAPRED_HOME is /usr/lib/ha  
doop-mapreduce  
Note: /tmp/sqoop-cloudera/compile/2d1dd3b6276315cf6342c208e72fd142/Stocks.java u  
ses or overrides a deprecated API.  
Note: Recompile with -Xlint:deprecation for details.
```

Output

SQOOP COMMAND:

4) `hadoop fs -ls /BDAT1002/sqoop/keerthyraj`

5) `hadoop fs -cat /BDAT1002/sqoop/keerthyraj/part-m-00000`

```
ted. FinalApplicationStatus=SUCCEEDED. Redirecting to job history server
21/03/28 07:08:22 INFO mapreduce.ImportJobBase: Transferred 201 bytes in 908.736
4 seconds (0.2212 bytes/sec)
21/03/28 07:08:22 INFO mapreduce.ImportJobBase: Retrieved 9 records.
21/03/28 07:08:24 INFO util.AppendUtils: Creating missing output directory - kee
rthyraj
21/03/28 07:08:24 INFO tool.ImportTool: Saving incremental import state to the m
etastore
21/03/28 07:08:28 INFO tool.ImportTool: Updated data for job: Keerthyraaj
[cloudera@quickstart ~]$ hadoop fs -ls /BigData/sqoop/keerthyraj
ls: `/BigData/sqoop/keerthyraj': No such file or directory
[cloudera@quickstart ~]$ hadoop fs -ls /BDAT1002/sqoop/keerthyraj
Found 7 items
-rw-r--r-- 1 cloudera cloudera 50 2021-03-28 07:06 /BDAT1002/sqoop/kee
rthyraj/part-m-00000
-rw-r--r-- 1 cloudera cloudera 19 2021-03-28 07:06 /BDAT1002/sqoop/kee
rthyraj/part-m-00001
-rw-r--r-- 1 cloudera cloudera 20 2021-03-28 07:06 /BDAT1002/sqoop/kee
rthyraj/part-m-00002
-rw-r--r-- 1 cloudera cloudera 23 2021-03-28 07:06 /BDAT1002/sqoop/kee
rthyraj/part-m-00003
-rw-r--r-- 1 cloudera cloudera 30 2021-03-28 07:06 /BDAT1002/sqoop/kee
rthyraj/part-m-00004
-rw-r--r-- 1 cloudera cloudera 20 2021-03-28 07:06 /BDAT1002/sqoop/kee
rthyraj/part-m-00005
-rw-r--r-- 1 cloudera cloudera 39 2021-03-28 07:07 /BDAT1002/sqoop/kee
rthyraj/part-m-00006
[cloudera@quickstart ~]$ hadoop fs -cat /BDAT1002/sqoop/keerthyraj/part-m-00000
\AL,American Airlines,4416900
\APL,Apple,45217900
[cloudera@quickstart ~]$ █
```