**Perform UPSERT in Sqoop export.**

**Read a file from HDFS and based on the id field, perform UPSERT in MySQL table.**

**In UPSERT, if the field exists, then it is updated else it is inserted.**

**SOLUTION:**

*Step1:* Create a file with sample data with 2 fields id and name and move the file to HDFS location.

[acadgild@localhost training]$ cat emp.txt  
1,ANJALI  
2,NAIK  
3,DIVAKAR  
4,SHEELA  
5,DEEPTI  
6,ADVIKA  
  
[acadgild@localhost training]$ hadoop fs -mkdir /user/acadgild/sqoops  
  
[acadgild@localhost training]$ hadoop fs -put emp.txt /user/acadgild/sqoops/

[acadgild@localhost training]$ hadoop fs -cat /user/acadgild/sqoops/emp.txt

17/05/07 23:02:58 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable  
1,ANJALI  
2,NAIK  
3,DIVAKAR  
4,SHEELA  
5,DEEPTI  
6,ADVIKA

Step2:

Create a empty table in MYSQL :

mysql> create table emp( id int not null primary key, name varchar(50) );  
Query OK, 0 rows affected (0.02 sec)

Step 3:

Run the scoop command .This will populate the MYSQL table.  
[acadgild@localhost training]$ sqoop export --connect jdbc:mysql://localhost/db1  --table emp --username root --export-dir sqoops --input-fields-terminated-by ',';  
  
  
Step 4:Update few data and inset new data in the emp.txt file.  
[acadgild@localhost training]$ cat emp.txt   
1,ANJALI  
2,NAIK  
3,DIVAKAR  
4,SHEELA  
5,ANAMIKA  
6,RAHUL  
7,TANU

Step 5:Update the new updated file in same hdfs location  
  
  
[acadgild@localhost training]$ hadoop fs -put -f emp.txt /user/acadgild/sqoops/  
17/05/07 23:05:56 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable

[acadgild@localhost training]$ hadoop fs -cat /user/acadgild/sqoops/emp.txt  
17/05/07 23:06:14 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable  
1,ANJALI  
2,NAIK  
3,DIVAKAR  
4,SHEELA  
5,ANAMIKA  
6,RAHUL  
7,TANU  
  
Step 6:

Run the scoop command to update the data:  
[acadgild@localhost training]$ sqoop export --connect jdbc:mysql://localhost/db1  --table emp --username root --update-mode allowinsert --update-key id --export-dir sqoops --input-fields-terminated-by ',';  
  
  
Step 7:

Check in mysql to verify the new updated data.

mysql> select \* from emp;  
+----+---------+  
| id | name    |  
+----+---------+  
|  5 | ANAMIKA |  
|  1 | ANJALI  |  
|  2 | NAIK    |  
|  3 | DIVAKAR |  
|  4 | SHEELA  |  
|  6 | RAHUL   |  
|  7 | TANU    |  
+----+---------+  
7 rows in set (0.12 sec)