In Mysql

create database college;

use college;

CREATE TABLE topten(

customer\_id INT NOT NULL ,

fname VARCHAR(40) NOT NULL,

lname VARCHAR(40) NOT NULL,

age int NOT NULL,

profession VARCHAR(40) NOT NULL,

amount double NOT NULL

);

CREATE TABLE student\_master(

student\_id INT NOT NULL AUTO\_INCREMENT,

name VARCHAR(40) NOT NULL,

address VARCHAR(40) NOT NULL,

PRIMARY KEY ( student\_id ));

CREATE TABLE fy(

fy\_id INT NOT NULL AUTO\_INCREMENT,

student\_id INT NOT NULL,

result double NOT NULL,

PRIMARY KEY (fy\_id ));

show tables;

describe student\_master;

INSERT INTO student\_master

(name, address)

VALUES

("Sanjay", "Bangalore");

INSERT INTO student\_master

(name, address)

VALUES

("Rajiv", "Delhi");

INSERT INTO student\_master

(name, address)

VALUES

("Rajesh", "Chennai");

INSERT INTO student\_master

(name, address)

VALUES

("Sandeep", "Delhi");

INSERT INTO fy

(student\_id, result)

VALUES

(1, 81.90);

INSERT INTO fy

(student\_id, result)

VALUES

(2, 78.90);

INSERT INTO topten

( customer\_id,fname,lname,age,profession, amount)

Values

(4009485,'Stuart','House',58,'Teacher',1943.85);

INSERT INTO topten

( customer\_id,fname,lname,age,profession, amount)

Values

(4006425,'Joe','Burns',30,'Economist',1732.09);

LIST DATABASES

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[hduser@ubuntu ~]$ sqoop list-databases --connect jdbc:mysql://localhost --username root --password root;

LIST TABLES in a database

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[hduser@ubuntu ~]$ sqoop list-tables --connect jdbc:mysql://localhost/college --username root --password root;

Import one table (with key)from mysql into HDFS

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[hduser@ubuntu ~]$ sqoop import --connect jdbc:mysql://localhost/college --username root --password root --table student\_master --target-dir /hanoi/student\_master;

Add an extra record in mysql in college db

INSERT INTO student\_master

(name, address)

VALUES

("New", "New Place");

**WITH INCREMENTAL**

sqoop import --connect jdbc:mysql://localhost/college --username root --password root --table student\_master --check-column student\_id --incremental append --last-value 4 --target-dir /niit/student\_master;

**COMPRESS FILE**

sqoop import --connect jdbc:mysql://localhost/college --username root --password root --table student\_master --target-dir /niit/student\_master1 --compress -m 1;

Import one table (without key)from mysql into HDFS

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[hduser@ubuntu ~]$ sqoop import --connect jdbc:mysql://localhost/college --username root --password root --table topten --target-dir /niit/topten -m 1 ;

import table to avro type or a sequence

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sqoop import --connect jdbc:mysql://localhost/college --username root --password root --table topten --target-dir /niit/top10avro --as-avrodatafile -m 1 ;

sqoop import --connect jdbc:mysql://localhost/college --username root --password root --table topten --target-dir /niit/top10seq --as-sequencefile -m 1 ;

create avro table and load data in hive

CREATE TABLE toptenavro

ROW FORMAT SERDE 'org.apache.hadoop.hive.serde2.avro.AvroSerDe'

STORED AS INPUTFORMAT 'org.apache.hadoop.hive.ql.io.avro.AvroContainerInputFormat'

OUTPUTFORMAT 'org.apache.hadoop.hive.ql.io.avro.AvroContainerOutputFormat'

TBLPROPERTIES (

'avro.schema.literal'='{

"namespace": "abc",

"name": "top10",

"type": "record",

"fields": [

{ "name":"customer\_id","type":"int"}, { "name":"fname","type":"string"}, { "name":"lname","type":"string"},{ "name":"age","type":"int"},{ "name":"profession","type":"string"},{ "name":"amount","type":"double"}]

}');

load data inpath '/niit/top10avro/part-m-00000.avro' overwrite into table toptenavro;

(need to check for sequence format, unable to load the data in hive table)

sqoop import --connect jdbc:mysql://localhost/college --username root --password root --table topten --target-dir /niit/top10seq --as-sequencefile -m 1 ;

**WITH WHERE CLAUSE**

sqoop import --connect jdbc:mysql://localhost/college --username root --password root --table student\_master --where 'student\_id=1 or student\_id=3' --target-dir /niit/query -m 1;

**WITH QUERY**

sqoop import --connect jdbc:mysql://localhost/college --username root --password root --query 'select \* from student\_master where $CONDITIONS and student\_id=2' --target-dir /niit/query1 -m 1;

**WITH INNER JOINS in form of Query**

sqoop import --connect jdbc:mysql://localhost/college --username root --password root --query 'select a.student\_id, a.name, a.address, b.result from student\_master a, fy b where $CONDITIONS and a.student\_id=b.student\_id' --target-dir /niit/query2 -m 1;

**WITH LEFT OUTER JOINS in form of Query**

sqoop import --connect jdbc:mysql://localhost/college --username root --password 'root' --query 'select a.student\_id, a.name, a.address, b.result from

student\_master a left outer join fy b on a.student\_id = b.student\_id where $CONDITIONS' --target-dir /niit/query3 -m 1;

**WITH RIGHT OUTER JOINS in form of Query**

sqoop import --connect jdbc:mysql://localhost/college --username root --password 'root' --query 'select a.student\_id, a.name, a.address, b.result from

student\_master a right outer join fy b on a.student\_id = b.student\_id where $CONDITIONS' --target-dir /niit/query4 -m 1;

**WITH COLUMN CLAUSE**

sqoop import --connect jdbc:mysql://localhost/college --username root --password '' --table student\_master --columns "student\_id,name" --target-dir /niit/query5 -m 1;

Import all tables from mysql into hdfs ----------------------------------------------------

[hduser@ubuntu ~]$ sqoop import-all-tables --connect jdbc:mysql://localhost/college --username root --password root --warehouse-dir /niit/all\_tables ;

Import data into hive managed tables

First create a database college in hive

hive> create database college;

hive> quit;

sqoop import --connect jdbc:mysql://localhost/college --username root --password '' --table student\_master --hive-import --hive-table college.student\_profile -m 1;

sqoop import --connect jdbc:mysql://localhost/college --username root --password '' --table fy --hive-import --hive-table college.fyresults -m 1;

sqoop import --connect jdbc:mysql://localhost/college --username root --password '' --table student\_master --columns "student\_id,name" --hive-import --hive-table college.student1 -m 1;

sqoop import --connect jdbc:mysql://localhost/college --username root --password '' --table student\_master --where "student\_id = 1 or student\_id=3" --hive-import --hive-table college.student2 -m 1;

sqoop import --connect jdbc:mysql://localhost/college --username root --password 'root' --query 'select a.student\_id, a.name, a.address, b.result from student\_master a, fy b where $CONDITIONS and a.student\_id=b.student\_id' --hive-import --hive-table college.studentjoin --target-dir /niit/query20 -m 1;

**Importing Data into Hbase using Sqoop**

$ hbase shell

hbase > create 'college', 'student\_profile', 'fyresults'

hbase>describe 'college'

hbase> exit

sqoop import --connect jdbc:mysql://localhost/college --username root --password '' --table student\_master --columns "student\_id,name,address" --hbase-table college --column-family student\_profile --hbase-row-key student\_id -m 1;

sqoop import --connect jdbc:mysql://localhost/college --username root --password '' --table fy --columns "student\_id,result" --hbase-table college --column-family fyresults --hbase-row-key student\_id -m 1;

$ hbase shell

hbase > scan 'college'

sqoop export command

**nano /home/hduser/employee.txt**

**1201,satish,delhi**

**1202,krishna,mumbai**

**1203,amith,pune**

**1204,javed,chennai**

**1205,prudvi,bangalore**

**hadoop fs -put employee.txt /niit**

**nano /home/hduser/emp1.txt**

**1201,satish1,delhi**

**1202,krishna1,mumbai**

**1206,sanjay,pune**

**1207,rajiv,chennai**

**1208,vijay,bangalore**

**hadoop fs -put emp1.txt /niit**

In MySQl

use college;

CREATE TABLE employee\_master(

employee\_id INT NOT NULL AUTO\_INCREMENT,

name VARCHAR(40) NOT NULL,

address VARCHAR(40) NOT NULL,

PRIMARY KEY ( employee\_id ));

sqoop export --connect jdbc:mysql://localhost/college --username root --password 'root' --table employee\_master --update-mode allowinsert --update-key employee\_id --export-dir /Sqoop/employee.txt --input-fields-terminated-by ',' ;

sqoop export --connect jdbc:mysql://localhost/college --username root --password 'root' --table employee\_master --update-mode allowinsert --update-key employee\_id --export-dir /Sqoop/emp1.txt --input-fields-terminated-by ',' ;

**For Hbase:-**

CREATE TABLE customer(

customer\_id INT NOT NULL,

firstname VARCHAR(40) NOT NULL,

lastname VARCHAR(40) NOT NULL,

age int NOT NULL,

profession varchar(40) NOT NULL,

PRIMARY KEY ( customer\_id ));

sqoop export --connect jdbc:mysql://localhost/college --username root --password 'root' --table customer --update-mode allowinsert --update-key customer\_id --export-dir /HBase/input/custs --input-fields-terminated-by ',' ;

sqoop import --connect jdbc:mysql://localhost/retail --username root --password 'root' –table customer --columns "customer\_id,firstname,lastname,age,profession" --hbase-table retail --column-family customer --hbase-row-key customer\_id -m 1;