```
-- MySQL Commands
Login to mysql
_____
mysql -u root -p
mysql -u retail dba -p
-- SQOOP Commands
List the dataBases
_____
sqoop-list-databases \
--connect "jdbc:mysql://quickstart.cloudera:3306" \
--username retail dba \
--password cloudera
sqoop-list-databases \
--connect "jdbc:mysql://quickstart.cloudera:3306" \
--username root \
--password cloudera
Show tables
sqoop-list-tables \
--connect "jdbc:mysql://quickstart.cloudera:3306/retail_db" \
--username retail_dba \
--password cloudera
SQOOP eval
sqoop-eval \
--connect "jdbc:mysql://quickstart.cloudera:3306" \
--username retail dba \
--password cloudera \
--query "select * from retail db.customers limit 10"
Display Schema
_____
sqoop-eval \
--connect "jdbc:mysql://quickstart.cloudera:3306" \
--username retail dba \
--password cloudera \
--query "describe retail_db.orders"
or
in mysql
-----
```

```
describe tablename;
Import table from MYSQL to HDFS[With Primary Key]
______
sqoop import \
--connect "jdbc:mysql://quickstart.cloudera:3306/retail_db" \
--username retail dba \
--password cloudera \
--table orders \
--target-dir /queryresult
Import table from MYSQL to HDFS[Without Primary Key]
______
** It will through an error
sqoop import \
--connect "jdbc:mysql://quickstart.cloudera:3306/trendytech" \
--username root \
--password cloudera \
--table people \
--target-dir /peopleresult
Changing mapprer to 1
sqoop import \
--connect "jdbc:mysql://quickstart.cloudera:3306/trendytech" \
--username root \
--password cloudera \
--table people \
-m 1 \
--target-dir /peopleresult
Import All tables
_____
sqoop-import-all-tables \
--connect "jdbc:mysql://quickstart.cloudera:3306/retail_db" \
--username retail dba \
--password cloudera \
--as-sequencefile \
--warehouse-dir /user/cloudera/sqoopdir1
Store logs messages in some file
sqoop import \
--connect "jdbc:mysql://quickstart.cloudera:3306/retail db" \
--username retail dba \
--password cloudera \
--table orders \
--warehouse-dir /queryresult4 1>query.out 2>query.err
```

```
Compress the file
_____
sqoop import \
--connect jdbc:mysql://quickstart.cloudera:3306/retail db \
--username root \
--password cloudera \
--table orders \
--compress \
--warehouse-dir Allmyfiles
sqoop import \
--connect jdbc:mysql://quickstart.cloudera:3306/retail db \
--username root \
--password cloudera \
--table orders \
--compression-codec BZip2Codec \
--warehouse-dir Allmyfiles
Import only selected columns
_____
sqoop import \
--connect jdbc:mysql://quickstart.cloudera:3306/retail_db \
--username root \
--password cloudera \
--table customers \
--columns customer_id,customer_fname,customer_city \
--warehouse-dir Allmyfiles
Use Where class
sqoop-import \
--connect jdbc:mysql://quickstart.cloudera:3306/retail_db \
--username retail dba \
--password cloudera \
--table orders \
--columns order_id,order_customer_id,order_status \
--where "order_status='complete'" \
--target-dir UsingWhareClass
Customize boundary query
_____
sqoop import \
--connect jdbc:mysql://localhost:3306/retail_db \
--username retail dba \
--password cloudera \
```

```
--table orders \
--boundary-query "select 1,68883" \
--warehouse-dir /orderboundaryval
Customize boundary query with non primary key column
______
sqoop import \
--connect jdbc:mysql://localhost:3306/retail_db \
--username retail_dba \
-P \
--table order items \
--boundary-query "select min(order item order id), max(order item order id)
from order items where order item order id > 10000" \
--warehouse-dir /user/cloudera/bvqresult
Sgoop import using split by
_____
** Create a table without primary key
create table orders no pk(
order id int (11) not null,
order date datetime not null,
order_customer_id int(11) not null,
order status varchar (45) not null
);
** Copy table content
insert into orders no pk
select order id, order date, order customer id, order status from orders;
** Below query fails bz there is no primary key present
sqoop import \
--connect jdbc:mysql://localhost:3306/retail_db \
--username retail dba \
-P \
--table orders_no_pk \
--warehouse-dir /ordersnopk
sqoop import \
--connect jdbc:mysql://localhost:3306/retail db \
--username retail_dba \
-P \
--table orders no pk \
--split-by order id \
--warehouse-dir /ordersnopk
Split by on non numeric columns
```

```
sqoop import \
-Dorg.apache.sqoop.splitter.allow_text_splitter=true \
--connect jdbc:mysql://localhost:3306/retail db \
--username retail dba \
-P \
--table orders no pk \
--split-by order status \
--warehouse-dir /ordersnopk
--delete-target-dir
Auto reset to one mapper
_____
sqoop-import-all-tables \
--connect jdbc:mysql://localhost:3306/retail_db \
--username retail_dba \
-P \
--autoreset-to-one-mapper \
--warehouse-dir /autoresetresult
Delimeters
_____
sqoop import \
--connect jdbc:mysql://localhost:3306/retail_db \
--username retail_dba \
--password cloudera \
--table orders \
--fields-terminated-by '|' \
--lines-terminated-by ';' \
--warehouse-dir /delimitedresult
Create hive table
_____
sqoop create-hive-table \
--connect jdbc:mysql://localhost:3306/retail db \
--username retail dba \
--password cloudera \
--table orders \
--hive-table emps \
--fields-terminated-by ','
Sqoop verbose
_____
sqoop import \
--connect jdbc:mysql://localhost:3306/retail_db \
--username retail dba \
--password cloudera \
```

```
--table orders \
--verbose \
--target-dir /verboseresult
Sgoop Append
_____
sqoop import \
--connect jdbc:mysql://localhost:3306/retail_db \
--username retail_dba \
--password cloudera \
--table orders \
--verbose \
--target-dir /user/cloudera/appendresult \
--append
Dealing with NULL while importing data
_____
sqoop import \
--connect jdbc:mysql://localhost:3306/retail_db \
--username retail dba \
--password cloudera \
--table orders \
--verbose \
--warehouse-dir /user/cloudera/nullstringresult \
--delete-target-dir \
--null-non-string "-1"
sqoop import \
--connect jdbc:mysql://localhost:3306/retail db \
--username retail_dba \
--password cloudera \
--table orders \
--verbose \
--warehouse-dir /user/cloudera/nullstringresult \
--delete-target-dir \
--null-string "Nullispresent"
create table people(
PersonID int,
LastName varchar(255),
FirstName varchar(255),
Address varchar(255),
City varchar(255)
);
```

```
insert into people values
(101, 'rao', 'mohan', 'whitefield', 'bangalore'),
(102, 'reddy', 'srinivash', 'habala', 'hydetabad'),
(103, 'sharma', 'amit', 'marathali', 'bangalore'),
(104, 'sharma', 'amit', 'majestic', 'hyderabad');
SOOOP EXPORT
*************************
*************************
create database banking;
create table card transactions(
card_id bigint,
member_id bigint,
amount int(10),
post id bigint,
transaction dt varchar(255),
status varchar(255),
primary key (card_id, transaction_dt)
);
Sgoop export
______
sgoop export \
--connect jdbc:mysql://localhost:3306/banking \
--username root \
--password cloudera \
--table card_transactions \
--export-dir /data/cardmembers.csv \
--fields-terminated-by ','
Staging Table
______
create table card_transactions(
transaction id int(10),
card id bigint,
member_id bigint,
amount int(10),
postcode int(10),
pos id bigint,
transaction dt varchar(255),
status varchar(255),
primary key (transaction_id)
);
```

```
create table card_transactions_stage(
transaction id int(10),
card id bigint,
member_id bigint,
amount int(10),
postcode int(10),
pos_id bigint,
transaction_dt varchar(255),
status varchar(255),
primary key (transaction_id)
);
sqoop export \
--connect jdbc:mysql://localhost:3306/banking \
--username root \
--password cloudera \
--table card transactions \
--staging-table card transactions stage \
--export-dir /data/cardmembers.csv \
--fields-terminated-by ','
Sqoop Incremental
Append
______
sqoop import \
--connect jdbc:mysql://localhost:3306/retail_db \
--username root \
--password cloudera \
--table orders \
--warehouse-dir /data \
--incremental append \
--check-column order_id \
--last-value 0
21/06/20 06:19:36 INFO tool.ImportTool: --incremental append
21/06/20 06:19:36 INFO tool.ImportTool:
                                   --check-column order id
21/06/20 06:19:36 INFO tool.ImportTool:
                                   --last-value 68883
```

```
-- Add below columns and run query
insert into orders values(68884,'2014-07-23 00:00:00',5522,'COMPLETE');
insert into orders values(68885,'2014-07-23 00:00:00',5522,'COMPLETE');
insert into orders values(68886,'2014-07-23 00:00:00',5522,'COMPLETE');
insert into orders values(68887,'2014-07-23 00:00:00',5522,'COMPLETE');
insert into orders values(68888,'2014-07-23 00:00:00',5522,'COMPLETE');
insert into orders values(68889,'2014-07-23 00:00:00',5522,'COMPLETE');
commit;
sqoop import \
--connect jdbc:mysql://localhost:3306/retail db \
--username root \
--password cloudera \
--table orders \
--warehouse-dir /data \
--incremental append \
--check-column order id \
--last-value 68883
hadoop fs -cat /data/orders/* | wc -l --> to see No.of lines
hadoop fs -cat /data/orders/* | tail --> to see last the lines which are exist in
last
LastModified
sqoop import \
--connect jdbc:mysql://localhost:3306/retail db \
--username root \
--password cloudera \
--table orders \
--warehouse-dir /data \
--incremental lastmodified \
--check-column order date \
--last-value 0 \
--append
-- Here we are modifying the data and collecting the current time stamp.
insert into orders values(68884,current_timestamp,5523,'COMPLETE');
insert into orders values(68885,current timestamp,5523,'COMPLETE');
insert into orders values(68886,current timestamp,5523,'COMPLETE');
insert into orders values(68887,current timestamp,5523,'COMPLETE');
insert into orders values(68888,current timestamp,5523,'COMPLETE');
insert into orders values(68889,current timestamp,5523,'COMPLETE');
```

```
update orders set order_status='COMPLETE'
and order_date = current_timestamp
WHERE ORDER ID = 68862;
commit;
21/06/20 07:31:41 INFO tool.ImportTool: --incremental lastmodified
21/06/20 07:31:41 INFO tool.ImportTool: --check-column order_date
21/06/20 07:31:41 INFO tool.ImportTool: --last-value 2021-06-20 07:30:54.0
sqoop-import \
--connect jdbc:mysql://quickstart.cloudera:3306/retail db \
--username root \
--password cloudera \
--table orders \
--warehouse-dir /data \
--incremental lastmodified \
--check-column order date \
--last-value '2021-06-20 07:30:54.0' \
--append
hadoop fs -cat /data/orders/* | grep 68862 --> it will display 2 records
21/06/20 07:44:58 INFO tool.ImportTool: --incremental lastmodified
21/06/20 07:44:58 INFO tool.ImportTool: --check-column order_date
21/06/20 07:44:58 INFO tool.ImportTool: --last-value 2021-06-20 07:44:14.0
Merge
sqoop-import \
--connect jdbc:mysql://quickstart.cloudera:3306/retail db \
--username root \
--password cloudera \
--table orders \
--warehouse-dir /data \
--incremental lastmodified \
--check-column order date \
--last-value '2021-06-20 08:39:35.0' \
--merge-key order_id
21/06/20 08:28:48 INFO tool.ImportTool: --incremental lastmodified
21/06/20 08:28:48 INFO tool.ImportTool: --check-column order date
21/06/20 08:28:48 INFO tool.ImportTool: --last-value 2021-06-20 08:27:04.0
```

```
-- For append
sqoop job \
--create job_orders \
-- import \
--connect jdbc:mysql://localhost:3306/retail db \
--username root \
--password cloudera \
--table orders \
--warehouse-dir /data \
--incremental append \
--check-column order id \
--last-value 0
sqoop job --exec job_orders
-- For lastmodified
sqoop job \
--create job_orders_lastmodified \
-- import \
--connect jdbc:mysql://localhost:3306/retail_db \
--username root \
--password cloudera \
--table orders \
--warehouse-dir /data \
--incremental lastmodified \
--check-column order date \
--last-value 0 \
--append
sqoop job --exec job_orders_lastmodified
Create Password file
______
echo -n "cloudera" >> .password-file
sqoop job \
--create job_orders \
-- import \
--connect jdbc:mysql://quickstart.cloudera:3306/retail_db \
--username root \
--password-file file:///home/cloudera/.password-file \
--table orders \
--warehouse-dir /data \
--incremental append \
--check-column order_id \
```

--last-value 0

##