Sqoop Experiment:
1. Login to mysql using following command
 mysql -u root -pcloudera
2.
1. create database college;
2. use college;
3. create table student(StudentID int NOT NULL,Name varchar(20),Phone_No varchar(10),Department varchar(10),PRIMARY KEY(StudentID));
4. insert into student values(1,"Merisa",876721086,"COMPS");
   insert into student values(2,"Priyanka",9847582901,"IT");
   insert into student values(3,"Siya",6374823918,"EXTC");
   insert into student values(4,"Ishaan",8978323934,"EXTC");
   insert into student values(5,"Jeil",8921034567,"IT");
5. Sqoop - list database
   sqoop list-databases --connect jdbc:mysql://quickstart:3306/ --password cloudera --username root;

```
information_schema
cm
college
employee
firehose
hue
metastore
mysql
nav
navms
oozie
retail_db
rman
sentry
```

6. Sqoop - list tables
   sqoop list-tables --connect jdbc:mysql://quickstart:3306/college --username root --password cloudera;

```
[cloudera@quickstart ~]$ sqoop list-tal
Warning: /usr/lib/sqoop/../accumulo do
Please set $ACCUMULO_HOME to the root
23/11/05 20:50:30 INFO sqoop.Sqoop: Ru
23/11/05 20:50:30 WARN tool.BaseSqoopT
23/11/05 20:50:30 INFO manager.MySQLMal
student
```

A] Sqoop- IMPORT Command
1] importing table from my sql to HDFS:
sqoop import --connect jdbc:mysql://quickstart:3306/college --password cloudera --username root --table student;

```
                Bytes Written=119
23/11/05 21:02:58 INFO mapreduce.ImportJobBase: Transferred 119 bytes in 35.5377 seconds (3.3486 bytes/sec)
23/11/05 21:02:58 INFO mapreduce.ImportJobBase: Retrieved 5 records.
```

hadoop fs -ls

```
[cloudera@quickstart ~]$ hadoop fs -ls
Found 1 items
drwxr-xr-x   - cloudera cloudera          0 2023-11-05 21:02 student
```

hadoop fs -ls student

```
Found 6 items
-rw-r--r--   1 cloudera cloudera           0 2023-11-05 21:02 student/_SUCCESS
-rw-r--r--   1 cloudera cloudera          25 2023-11-05 21:02 student/part-m-00000
-rw-r--r--   1 cloudera cloudera          25 2023-11-05 21:02 student/part-m-00001
-rw-r--r--   1 cloudera cloudera          23 2023-11-05 21:02 student/part-m-00002
-rw-r--r--   1 cloudera cloudera          25 2023-11-05 21:02 student/part-m-00003
-rw-r--r--   1 cloudera cloudera          21 2023-11-05 21:02 student/part-m-00004
```

hadoop fs -cat /user/cloudera/student/part*

```
[cloudera@quickstart ~]$ hadoop fs -cat /user/cloudera/student/part*
1,Merisa,876721086,COMPS
2,Priyanka,9847582901,IT
3,Siya,6374823918,EXTC
4,Ishaan,8978323934,EXTC
5,Jeil,8921034567,IT
```

sqoop import --connect jdbc:mysql://quickstart:3306/college --password cloudera --username root --table student --target-dir /user/cloudera/xie;

```
                Bytes Written=119
23/11/05 21:20:52 INFO mapreduce.ImportJobBase: Transferred 119 bytes in 31.2413 seconds (3.8091 bytes/sec)
23/11/05 21:20:52 INFO mapreduce.ImportJobBase: Retrieved 5 records.
```

hadoop fs -ls

```
Found 2 items
drwxr-xr-x   - cloudera cloudera          0 2023-11-05 21:02 student
drwxr-xr-x   - cloudera cloudera          0 2023-11-05 21:20 xie
```

hadoop fs -cat /user/cloudera/xie/part*

```
1,Merisa,876721086,COMPS
2,Priyanka,9847582901,IT
3,Siya,6374823918,EXTC
4,Ishaan,8978323934,EXTC
5,Jeil,8921034567,IT
```

sqoop import --connect jdbc:mysql://quickstart:3306/college --password cloudera --username root --table student --where "StudentID<4" --target-dir /user/cloudera/student1;

```
23/11/05 21:31:35 INFO mapreduce.ImportJobBase: Transferred 73 bytes in 22.2926 seconds (3.2746 bytes/sec)
23/11/05 21:31:35 INFO mapreduce.ImportJobBase: Retrieved 3 records.
```

hadoop fs -cat /user/cloudera/student1/part*

1,Merisa,876721086,COMPS
2,Priyanka,9847582901,IT
3,Siya,6374823918,EXTC

sqoop export --connect jdbc:mysql://quickstart:3306/college --password cloudera --username root --table stud --export-dir /user/cloudera/student1;

```
23/11/05 21:45:08 INFO mapreduce.ExportJobBase: Transferred 825 bytes in 22.2501 seconds (37.0785 bytes/sec)
23/11/05 21:45:08 INFO mapreduce.ExportJobBase: Exported 3 records.
```

```
mysql> select * from stud;
+-----------+----------+------------+------------+
| StudentID | Name     | Phone_No   | Department |
+-----------+----------+------------+------------+
|         1 | Merisa   | 876721086  | COMPS      |
|         2 | Priyanka | 9847582901 | IT         |
|         3 | Siya     | 6374823918 | EXTC       |
+-----------+----------+------------+------------+
```