Assignment - 6.1

Task1: Use Sqoop tool to export data present in SQOOPOUT folder made while demo of Import table.

Answer1: Here Sqoop import is already performed; now same set of records will be loaded to the Person table which has been received as a part of Sqoop Import.

Person table prior to import command:

```
mysql> select * from Person;
+-----------+-------+--------+--------------+---------------+
| person_id | lname | fname  | area         | city          |
+-----------+-------+--------+--------------+---------------+
|         1 | Shyam | Ram    | Patna        | Bihar         |
|         2 | Tanya | Priya  | Whitefiled   | Bangalore     |
|         3 | James | Brown  | New York     | United States |
|         4 | Jhon  | Miller |  Los Angeles | United States |
+-----------+-------+--------+--------------+---------------+
4 rows in set (0.00 sec)
```

Import command:

==sqoop import --connect jdbc:mysql://localhost/simplidb --table Person --username root -P -target-dir /sqoopout -m 1==

```
[acadgild@localhost ~]$ sqoop import --connect jdbc:mysql://localhost/simplidb --table Person --username root -P -target-dir /sqoopout
-m 1
```

Import Output:

```
18/03/21 23:31:35 INFO mapreduce.ImportJobBase: Transferred 138 bytes in 22.9268 seconds (6.0192 bytes/sec)
18/03/21 23:31:35 INFO mapreduce.ImportJobBase: Retrieved 4 records.
```

```
[acadgild@localhost ~]$ hadoop fs -cat /sqoopout/part-m-00000
18/03/21 23:43:12 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes whe
re applicable
Patna,Bihar,Ram,Shyam,1
Whitefiled,Bangalore,Priya,Tanya,2
New York,United States,Brown,James,3
 Los Angeles ,United States,Miller,Jhon,4
```

Now use below command to delete the records from Person Table(before exporting the records).

mysql> ==delete from Person;==

Export Command:

==sqoop export --connect jdbc:mysql://localhost/simplidb --table Person -username root -P --export-dir /sqoopout/part-m-00000==

```
[acadgild@localhost ~]$ sqoop export --connect jdbc:mysql://localhost/simplidb --table Person -username root -P --export-dir /sqoopout
/part-m-00000
Warning: /home/acadgild/install/sqoop/sqoop-1.4.6.bin__hadoop-2.0.4-alpha/../hcatalog does not exist! HCatalog jobs will fail.
Please set $HCAT_HOME to the root of your HCatalog installation.
Warning: /home/acadgild/install/sqoop/sqoop-1.4.6.bin__hadoop-2.0.4-alpha/../accumulo does not exist! Accumulo imports will fail.
Please set $ACCUMULO_HOME to the root of your Accumulo installation.
18/03/21 23:32:31 INFO sqoop.Sqoop: Running Sqoop version: 1.4.6
```

Export Output:

```
18/03/21 23:33:23 INFO mapreduce.ExportJobBase: Transferred 937 bytes in 40.8595 seconds (22.9322 bytes/sec)
18/03/21 23:33:23 INFO mapreduce.ExportJobBase: Exported 4 records.
```

Person table after execution of export command:

```
mysql> select * from Person;
+-----------+-------+--------+-------------+---------------+
| person_id | lname | fname  | area        | city          |
+-----------+-------+--------+-------------+---------------+
|         1 | Shyam | Ram    | Patna       | Bihar         |
|         2 | Tanya | Priya  | Whitefiled  | Bangalore     |
|         3 | James | Brown  | New York    | United States |
|         4 | Jhon  | Miller | Los Angeles | United States |
+-----------+-------+--------+-------------+---------------+
4 rows in set (0.00 sec)
```

Here we can see the same set pf records is loaded back using the export command.

Task2: Use Sqoop tool to export data present in SQOOPOUT folder made while demo of Import table with parameter person_id =3.

Answer2:

Import command: Import is done only for a single record with person_id = 3. – using the below command.

==**sqoop import --connect jdbc:mysql://localhost/simplidb --table Person --username root -P -target-dir /sqoopout -m 1 --where "person_id = 3"**==

```
[acadgild@localhost ~]$ sqoop import --connect jdbc:mysql://localhost/simplidb --table Person --username root -P -target-dir /sqoopout
 -m 1 --where "person_id = 3"
Warning: /home/acadgild/install/sqoop/sqoop-1.4.6.bin__hadoop-2.0.4-alpha/../hcatalog does not exist! HCatalog jobs will fail.
Please set $HCAT_HOME to the root of your HCatalog installation.
Warning: /home/acadgild/install/sqoop/sqoop-1.4.6.bin__hadoop-2.0.4-alpha/../accumulo does not exist! Accumulo imports will fail.
Please set $ACCUMULO_HOME to the root of your Accumulo installation.
18/03/22 00:16:22 INFO sqoop.Sqoop: Running Sqoop version: 1.4.6
Enter password:
```

Import Output:

```
18/03/22 00:16:57 INFO mapreduce.ImportJobBase: Transferred 37 bytes in 24.6791 seconds (1.4992 bytes/sec)
18/03/22 00:16:57 INFO mapreduce.ImportJobBase: Retrieved 1 records.
```

```
[acadgild@localhost ~]$ hadoop fs -cat /sqoopout/part-m-00000
18/03/22 00:17:19 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes whe
re applicable
New York,United States,Brown,James,3
```

Now delete the record in mysql having person_id = 3 before executing the export command.

Person table after removing the record with Person_id =3:

```
mysql> select * from Person;
+-----------+-------+--------+--------------+---------------+
| person_id | lname | fname  | area         | city          |
+-----------+-------+--------+--------------+---------------+
|         1 | Shyam | Ram    | Patna        | Bihar         |
|         2 | Tanya | Priya  | Whitefiled   | Bangalore     |
|         4 | Jhon  | Miller | Los Angeles  | United States |
+-----------+-------+--------+--------------+---------------+
3 rows in set (0.00 sec)
```

Export command remains the same for exporting the record as mentioned below.

sqoop export --connect jdbc:mysql://localhost/simplidb --table Person --username root -P --export-dir /sqoopout/part-m-00000

```
[acadgild@localhost ~]$ sqoop export --connect jdbc:mysql://localhost/simplidb --table Person --username root -P --export-dir /sqoopou
t/part-m-00000
Warning: /home/acadgild/install/sqoop/sqoop-1.4.6.bin__hadoop-2.0.4-alpha/../hcatalog does not exist! HCatalog jobs will fail
```

Export output:

```
18/03/22 00:18:56 INFO mapreduce.ExportJobBase: Transferred 670 bytes in 41.8507 seconds (16.0093 bytes/sec)
18/03/22 00:18:56 INFO mapreduce.ExportJobBase: Exported 1 records.
You have new mail in /var/spool/mail/acadgild
```

The record is added to person table as mentioned in the screenshot.

```
mysql> select * from Person;
+-----------+-------+--------+--------------+---------------+
| person_id | lname | fname  | area         | city          |
+-----------+-------+--------+--------------+---------------+
|         1 | Shyam | Ram    | Patna        | Bihar         |
|         2 | Tanya | Priya  | Whitefiled   | Bangalore     |
|         3 | James | Brown  | New York     | United States |
|         4 | Jhon  | Miller | Los Angeles  | United States |
+-----------+-------+--------+--------------+---------------+
4 rows in set (0.00 sec)
```