Experiment No.2
Use of Sqoop tool
Date of Performance:
Date of Submission:

AIM : To install SQOOP and execute basic commands of Hadoop eco system component Sqoop.

THEORY :
Installation and configuration of SQOOP

1) Download SQOOP from https://sqoop.apache.org
2) Unzip and Install SQOOP
    - After Downloading the SQOOP, we need to Unzip the sqoop-1.4.7.bin__hadoop-2.6.0.tar.gz file.
3) Create a folder and move the final extracted file in it.
    - Set up the environment variables
    - Set SQOOP_HOME
4) Set up path variable
5) Configure SQOOP

Basic SQOOP commands:

1. List Table

This command lists the particular table of the database in MYSQL server.

```
sqoop  list - tables --connect jdbc:mysql://localhost/payment --username gatner
```

2. Target directory

This command import table in a specific directory in HDFS. -m denotes mapper argument.

They have an integer value.

```
$ sqoop import  --connect jdbc:mysql://localhost/inventory --username jony -table inventory --m 1 --target-dir/inv
```

3. sqoop-eval

This command runs SQL queries of the respective database.

```
$ sqoop eval --connect --query "SQLQuery"
```

4. sqoop – version

This command displays a version of the sqoop.

```
$ sqoop version    sqoop {revnumber}
```

5. sqoop-job

This command allows us to create a job, the parameters that are created can be invoked at any time. They take options like (–create,–delete,–show,–exit).

```
$ sqoop job --create --import --connect  --table
```

6. code gen

This Sqoop command creates java class files which encapsulate the imported records. All the java files are recreated, and new versions of a class are generated. They generate code to interact with database records. Retrieves a list of all the columns and their data types.

```
$ sqoop codegen --connect -table
```

7. List Database

This Sqoop command lists all the available databases in the RDBMS server.

```
>$ sqoop list - database -- connect
```

Sqoop is a command-line interface application for transferring data between relational databases and Hadoop.

CONCLUSION :

Thus, we conclude that the installation and usage of Apache Sqoop is a powerful and versatile tool for efficiently transferring data between Hadoop and relational databases. Its installation is relatively straightforward, involving the setup of necessary dependencies and configuration of connection parameters. Once installed, Sqoop offers a simple command-line interface and can be easily integrated into data workflows, making it a valuable asset for data engineers and analysts. Whether you need to ingest data from a database into Hadoop or export data from Hadoop to a relational database, Sqoop simplifies the process, ensuring the seamless movement of data, and contributing to more effective big data processing and analysis.