

SQL for Data Science

Module 5: Importing and Exporting Data

Learning Objectives of this module

In this module we will learn how to import and export data from MySQL

- **Importing data from CSV file**
- **Exporting data to a CSV file**
- **Backing up data to SQL file**
- **Restoring data from SQL file**



Command

```
LOAD DATA LOCAL INFILE <full_file_path> INTO TABLE <tableName>  
COLUMNS TERMINATED BY ',' OPTIONALLY ENCLOSED BY '"' ESCAPED BY '\"'  
  
LINES TERMINATED BY '\n'  
  
IGNORE 1 LINES;
```

Things to Note

- A table with same schema as csv file must be present in the database
- The command just helps us insert data into that table
- Make sure you put the correct delimiter and check for header

Command

```
SELECT *  
  
    INTO OUTFILE <outputFilePath>  
  
    FIELDS TERMINATED BY ',' OPTIONALLY ENCLOSED BY ''''  
  
    LINES TERMINATED BY '\n' FROM <tableName>;
```

Things to note

- Has to be done a table at a time

Command

```
mysqldump -h <host> -uroot -p <databaseName> > <dumpFilePath>
```

Things to note

- This has to be done on OS terminal not inside MySQL
- Make sure to put the database name, else it will backup all databases
- Put the -h host option if database is on another host
- Change the username accordingly

Command

```
mysql -h <host> -u <username> -p <databaseName> < <sqlFilePath>
```

Things to Note

- This has to be done on OS terminal not inside MySQL
- The SQL file should be a complete backup containing the schema of the database as well as the data else this wont work
- Blank database should be present at the target machine