

Introducing SQL Magic

Objective

In this reading, you will learn about the SQL magic commands.

Jupyter notebooks have a concept of **Magic** commands that can simplify working with Python, and are particularly useful for data analysis. Your notebooks can have two types of magic commands:

- **Cell magics:** start with a double **%%** sign and apply to the entire cell
- **Line magics:** start with a single **%** (percent) sign and apply to a particular line in a cell

Their usage is of the format:

%magicname arguments

So far in the course you learned to access data from a database using the Python DB-API (and specifically `ibm_db`). With this API execution of queries and fetching their results involves multiple steps. You can use the **SQL Magic** commands to execute queries more easily.

For example if you want to execute a query to select some data from a table and fetch its results, you can simply enter a command like the following in your Jupyter notebook cell:

%sql select * from tablename

Although SQL magic simplifies working with databases, it has some limitations. For example, unlike DB-API, there are no explicit methods to close a connection and free up resources.