### MySQL and PostgreSQL Cheatsheet

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| **Description** | **PostgreSQL / Shell command** | **MySQL command** |
| Make sure the codepage is set | chcp 65001 |  |
| **Access / Overview** |  |  |
| Connect to main database as admin user | psql –U postgres | mysql -u root -p |
| Connect to specific database | psql -d db\_name |  |
| Use/Connect to a database named 'some\_database' | \c[onnect] some\_database | USE some\_database; |
| Show command overview | \? |  |
| Exit client | \q |  |
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| Show databases | \l[ist] | SHOW DATABASES; |
| Show tables, views, users, indexes | \dt, \dv, \du, \di | SHOW TABLES; |
|  |  | SHOW INDEX FROM some\_table; |
| Show table details (columns, types) | \d+ some\_table | DESCRIBE some\_table; |
| List all columns in a table (containing many columns) | select column\_name from information\_schema.columns where table\_name = 'my\_table' order by column\_name asc; |  |
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| **User management** |  |  |
| Create user that can create databases | CREATE ROLE username WITH createdb LOGIN [PASSWORD 'password']; | CREATE USER harry IDENTIFIED BY 'foo'; |
| Change password of an existing user | ALTER ROLE username WITH PASSWORD 'password'; | … |
| Grants access to a database (as admin user only) | GRANT ALL PRIVILEGES ON DATABASE database TO username; | GRANT ALL PRIVILEGES ON database.\* TO username@localhost; |
| Grants access to create databases. | ALTER USER username CREATEDB; | ? |
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| **Formatting Output** |  |  |
| Expanded table formatting mode (pretty print) | \x on | YOUR QUERY\G; |
| List data from a column as a single row, comma separated | SELECT array\_to\_string( array( SELECT id FROM table ), ',' ) |  |
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| **Editing Tables** |  |  |
| Renaming a table | ALTER TABLE table\_name RENAME TO table\_name\_new; |  |
| Renaming table columns | alter table noise.hoods rename column noise\_sqkm to complaints\_sqkm; |  |
| Changing data type of columns | alter table noise.hoods alter column noise\_area type float; |  |
| Compute values from two columns and add to table | update noise.hoods set noise\_area = noise/(area/1000); |  |
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| **Data Input/Output** |  |  |
| Server-side copy | COPY … |  |
| Client-side copy | \copy … |  |
| import data from a CSV file (server-side) | COPY noise.locations (name, complaint, descript, boro, lat, lon)  FROM 'noise.csv' WITH CSV HEADER; |  |
| export data as a CSV with Headers (client-side) | \c dob\_jobs\_2014 to 'test.csv' DELIMITER ',' CSV HEADER; |  |
| To current workspace without saving to a file | COPY (SELECT foo FROM bar) TO STDOUT CSV HEADER; |  |
| Export without opening an interactive session | psql -U postgres -d bibliothek -A -F"," -P"footer=off" -c"select \* from fachbuch;" > "output.csv" |  |
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