Command line PostgreSQL: Takeaways 🖻

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Syntax

• Starting the PostgreSQL command line tool:

psql

• Exiting the PostGreSQL command line tool:

\q

• Creating a database:

CREATE DATABASE dbName;

• Listing databases:

\1

• Listing all tables in the current database:

\dt

• Listing the users that have access to the database:

\du

• Connecting to a specified database:

```
psql -d dbName
```

• Creating a user:

CREATE ROLE userName;

• Allowing a user to login to PostgreSQL and run queries:

```
CREATE ROLE userName WITH LOGIN;
```

• Creating a password for a user:

```
CREATE ROLE userName WITH LOGIN PASSWORD 'password':
```

• Allowing a user to create databases:

```
CREATE ROLE userName WITH CREATEDB LOGIN PASSWORD 'password';
```

• Allowing a user to create other users:

```
CREATE ROLE userName WITH CREATEROLE LOGIN PASSWORD 'password';
```

• Making the user a superuser:

```
CREATE ROLE userName WITH LOGIN PASSWORD 'password' SUPERUSER;
```

• Granting a user permissions to access a table:

```
GRANT SELECT ON tableName TO userName;
```

• Granting a user complete control of a table:

```
GRANT ALL PRIVILEGES ON tableName to userName;
```

• Displaying what privileges have been granted to users:

```
\dp tableName
```

• Removing permissions from a user:

```
REVOKE SELECT ON tableName FROM userName;
```

• Removing all permissions from a user:

```
REVOKE ALL PRIVILEGES on tableName FROM userName;
```

Concepts

- The PostgreSQL command line tool is called psql .
- psql connects to a running PostgreSQL server process, which enables you to:
 - Run queries.
 - Manage users and permissions.
 - Manage databases.
 - See PostgreSQL system information.
- Queries in psql must end with a semicolon (;) or they won't be performed.
- When users are created, they don't have any ability, or permissions, to access tables in existing databases.
- You can grant or revoke multiple permissions by separating them with commas.

- You can grant or revoke users ability to use the **SELECT**, **INSERT**, **UPDATE**, or **DELETE** clauses on a table.
- A superuser can perform any function in a database.

Resources

- psql documentation
- <u>17 Practical psql commands</u>



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