How to use command to access the postgreSQL?

Reference

> [PostgreSQL Tutorial – Comprehensive Postgresql Tutorial](#)

prerequisite

- make sure you add the `bin` subdirectory to the path

  ```
  1  # use following command to check whether you configure successfully
  2  psql --version
  ```

- Then you can use `psql` command in the cmd or powershell

Connect to PostgreSQL database

```
1  psql -h <host> -d <database> -U <username>
```

-h: Specify the hostname or IP address of the database server to be connected. Can be omitted if localhost.

-d: Specify the database name you want to connnect.

-U: (**Capital U**) Specify the identity you want to log in.

After `enter`, input your password to connect the database

Switch to another database

```
1  \c <database> <username>
```

Switch to specified database using specified username.

Omit the `<username>` to switch the database

Cannot omit the `<database>` to switch the user(Avoid ambiguity)

List available databases

```
1  \l
```

List available tables

To list all tables in the **current database**

```
1  \dt
```

Describe a table

```
1   \d <table_name>
```

List available schema

schema is the namespace for a database object

```
1   # To list all schemas of the currently connected database
2   \dn
```

List available functions

```
1   # To list available functions in the current database
2   \df
```

List available views

view is a virtual table for further usage(create by `create view`)

```
1   \dv
```

List users and their roles

```
1   \du
```

check the working directory

```
1   \! cd
```

Execute psql commands from a file

```
1   \i filename
2   # the file should in the working directory
```

Terminate a query or other task in progress

press `ctrl` + `c`

Get help on psql commands

```
1   \?
```

Turn on/off query execution time

```
1   \timing
```

Edit command in your own editor

```
1   \e
```

psql will open the text editor defined by your EDITOR environment variable

After you type the command in the editor(don't forget the `;`), save it, and close the editor, psql will execute the command and return the result.

Quit psql

```
1   \q
```