

## PostgreSQL Command-Line Quick Reference

### PSQL Interactive Terminal

#### Connection Options

-h hostname --host=hostname	Host IP, machine name, or localhost (default: local socket)
-p portnumber --port=portnumber	Communication port (default: 5432)
-U username --username=username	Role/username (default: OS username)
-d databasename --dbname=databasename	Name of the database to connect to (default: OS user name, then Postgres )
-V --version	Print the psql version and exit.
-? --help=topic	Print general psql help documentation or specific help about a topic.
-l --list	List available databases, then exit.
-f filepath --file filepath	Load and execute commands within an external script file.
-c 'command'	Execute a SQL query or meta-command, then exit.
-X --no-psqlrc	Ignore the custom settings contained in the psqlrc file.

#### Example Usage

```
psql -h localhost -p 5432 -d postgres -U postgres
```

## Backslash Commands

<code>\?</code>	View help documentation on the psql meta-commands.
<code>\q</code>	Quit and exit the interactive terminal.
<code>\c</code> <code>\connect</code>	Switch databases within the same server. Parameters are entered in sequence: database, user, host, port. Use a single hyphen - to reuse current value.
<code>\conninfo</code>	Return details about the current connection.
<code>\h [topic]</code> <code>\help [topic]</code>	Print help documentation about SQL commands. enter – page through line by line space – skip to the next page q – quit to the psql prompt
<code>\l</code> <code>\l+</code>	List databases on the current server.
<code>\du</code> <code>\duS</code>	List user roles. Include system roles.
<code>\dn</code> <code>\dnS</code>	List database schemas (namespaces). Include system schemas.
<code>\dt</code> <code>\dt schemaname.</code> <code>\dtS</code>	List database tables within the users' search path. List tables in a specific schema. Include system tables.
<code>\di</code>	List database indexes.
<code>\dv</code>	List database view objects.
<code>\d objectname</code>	Describe object contents and list columns and data types.
<code>\o filepath</code> <code>\o</code>	Send query output to an external file. Send output to the internal aligned text display.
<code>\set</code>	View and update psql variables such as PROMPT1.
<code>\pset</code> <code>\pset format aligned</code> <code>\pset format csv</code> <code>\pset format html</code> <code>\pset format latex</code> <code>\pset border 1</code> <code>\pset title 'Title'</code>	View and update options for aligned and unaligned tables and other output parameters.

## Create Backups with pg\_dump and pg\_restore

<code>--help</code>	Print options for <code>pg_dump</code> and <code>pg_restore</code> .
<code>&gt; filepath</code>	Set output filepath and filename for <code>pg_dump</code> .
<code>--clean --if-exists</code>	Drop database objects before recreating them.
<code>--create</code>	Add CREATE DATABASE commands to the script.
<code>--inserts</code>	Use table INSERT commands instead of COPY for portability.
<code>-s</code> <code>--schema-only</code>	Only include database objects in the backup file, no data.
<code>-a</code> <code>--data-only</code>	Only include data in the backup, not objects.
<code>-t tablename</code> <code>-t 'schema.*'</code>	Only include a single table in the backup. Only include tables within a specific schema.
<code>-Fp</code> <code>--format plain</code>	Create a plain-text backup file (default option).
<code>-Fc</code> <code>--format custom</code>	Create a single-file archive backup.
<code>-C</code>	Create the empty database first when using <code>pg_restore</code> .
<code>-l</code>	Print table of contents of an archive format backup.
<code>-L filepath</code>	Load a table of content from an external file with <code>pg_restore</code> .

### Example Usage

Create a backup:

```
pg_dump -h localhost -U postgres --format plain database > filepath/backup.sql
```

Restore a plain-text backup:

```
psql -h localhost -d postgres -U postgres --file filepath/backup.sql
```

Restore an archive format backup using a customized table of contents file:

```
pg_restore -h localhost -U postgres -d postgres -C -L filepath/custom.contents filepath/database.dump
```

Full PostgreSQL client application documentation:

<https://www.postgresql.org/docs/current/reference-client.html>