

## POSTGRESQL 8.3 PSQL CHEAT SHEET

psql is located in the bin folder of the PostgreSQL install and PgAdmin III install.

This is psql 8.3.5, the PostgreSQL interactive terminal.

**Usage:** psql [OPTIONS]... [DBNAME [USERNAME]]

### General options:

-c COMMAND	run only single command (SQL or internal) and exit
-d, --dbname=NAME	specify database name to connect to (default: "logged in username here")
-f, --file=FILENAME	execute commands from file, then exit
--help	show this help, then exit
-l, --list	list available databases, then exit
-v NAME=VALUE	set psql variable NAME to VALUE
--version	output version information, then exit
-X	do not read startup file (~/.psqlrc)

### Interactive Console:

TYPE: \copyright	for distribution terms
\h for help with SQL commands	for help with SQL commands
\? for help with psql commands	for help with psql commands
\g or terminate with semicolon to execute query	or terminate with semicolon to execute query
\q to quit	to quit

GENERAL:	
\c[onnect] [DBNAME]- USER[- HOST]- PORT[-]	connect to new database
\cd [DIR]	change the current working directory
\encoding [ENCODING]	show or set client encoding
\h [NAME]	help on syntax of SQL commands, * for all commands
\set [NAME [VALUE]]	set internal variable, or list all if no parameters
\timing	toggle timing of commands (currently off)
\unset NAME	unset (delete) internal variable
\prompt [TEXT] NAME	prompt user to set internal variable
!\ [COMMAND]	execute command in shell or start interactive shell

QUERY BUFFER:	
\e [FILE]	edit the query buffer (or file) with external editor
\g [FILE]	send query buffer to server (and results to file or  pipe)
\p	show the contents of the query buffer
\r	reset (clear) the query buffer
\w FILE	write query buffer to file

INPUT/OUTPUT:	
\echo [STRING]	write string to standard output
\i FILE	execute commands from file
\o [FILE]	send all query results to file or  pipe
\qecho [STRING]	write string to query output stream (see \o)

INFORMATIONAL:	
\d [NAME]	describe table, index, sequence, or view
\d(t i s v s) [PATTERN] (add "+" for more detail)	list tables/indexes/sequences/views/system tables
\da [PATTERN]	list aggregate functions
\db [PATTERN]	list tablespaces (add "+" for more detail)
\dc [PATTERN]	list conversions
\dc	list casts
\dd [PATTERN]	show comment for object
\db [PATTERN]	list domains
\df [PATTERN]	list functions (add "+" for more detail)
\df [PATTERN]	list text search configurations (add "+" for more detail)
\dfd [PATTERN]	list text search dictionaries (add "+" for more detail)
\dft [PATTERN]	list text search templates
\dfp [PATTERN]	list text search parsers (add "+" for more detail)
\dg [PATTERN]	list groups
\dn [PATTERN]	list schemas (add "+" for more detail)
\do [NAME]	list operators
\dl	list large objects, same as \lo_list
\dp [PATTERN]	list table, view, and sequence access privileges
\dt [PATTERN]	list data types (add "+" for more detail)
\du [PATTERN]	list users
\l	list all databases (add "+" for more detail)
\z [PATTERN]	list table, view, and sequence access privileges (same as \dp)

FORMATTING	
\a	toggle between unaligned and aligned output mode
\C [STRING]	set table title, or unset if none
\f [STRING]	show or set field separator for unaligned query output
\H	toggle HTML output mode (currently off)
\set NAME [VALUE]	set table output option (NAME := {format border expanded fieldsep footer null numericlocale recordsep  tuples_only title tableattr pager})
\t	show only rows (currently off)
\T [STRING]	set HTML <table> tag attributes, or unset if none
\x	toggle expanded output (currently off)

COPY, LARGE OBJECT	
\copy ..	perform SQL COPY with data stream to the client host
\lo export LOBOID FILE	LOBOID FILE
\lo import FILE [COMMENT]	FILE [COMMENT]
\lo_list	
\lo_unlink LOBOID	large object operations

### Connection options:

-h, --host=HOSTNAME	database server host or socket directory
-p, --port=PORT	database server port number
-U, --username=NAME	connect as specified database user
-W, --password	force password prompt (should happen automatically)
-e, --exit-on-error	exit on error, default is to continue
-d DBNAME	some database

### psql automated shell examples

```
restore whole server
psql --host=localhost --username=someuser -f /path/to/pgdumpall.sql

Run an sql batch script against a database
psql -h localhost -U someuser -d somedb -f /path/to/somefile.sql

Run an sql batch script against a database and send output to file
psql -h localhost -U someuser -d somedb -f /path/to/scriptfile.sql -o /path/to/outputfile.txt

Run a single statement against a db
psql -U postgres -d pagila -c "CREATE TABLE test(some_id serial PRIMARY KEY, some_text text);"

Output data in html format
psql -h someserver -p 5432 -U someuser -d somedb -H -c "SELECT * FROM sometable" -o mydata.html
```

### psql Interactive mode

```
Launch interactive session
psql -h localhost -U postgres -d somedb

View help for SELECT * LIMIT
\h SELECT * LIMIT

List all tables in db with descriptions
\d+

List all tables in db with s in the name
\dt *s*

Cancel out of MORE screen
:q
```