Postgresql Database

- psql Command

psql Command

```
General
  \copyright             show PostgreSQL usage and distribution terms
  \crosstabview [COLUMNS] execute query and display results in crosstab
  \errverbose            show most recent error message at maximum verbosity
  \g [FILE] or ;         execute query (and send results to file or |pipe)
  \gdesc                 describe result of query, without executing it
  \gexec                 execute query, then execute each value in its result
  \gset [PREFIX]         execute query and store results in psql variables
  \gx [FILE]             as \g, but forces expanded output mode
  \q                     quit psql
  \watch [SEC]           execute query every SEC seconds

Help
  \? [commands]          show help on backslash commands
  \? options             show help on psql command-line options
  \? variables           show help on special variables
  \h [NAME]              help on syntax of SQL commands, * for all commands

Query Buffer
  \e [FILE] [LINE]       edit the query buffer (or file) with external editor
  \ef [FUNCNAME [LINE]]  edit function definition with external editor
  \ev [VIEWNAME [LINE]]  edit view definition with external editor
  \p                     show the contents of the query buffer
  \r                     reset (clear) the query buffer
  \s [FILE]              display history or save it to file
  \w FILE                write query buffer to file

Input/Output
  \copy ...              perform SQL COPY with data stream to the client host
  \echo [STRING]         write string to standard output
  \i FILE                execute commands from file
  \ir FILE               as \i, but relative to location of current script
  \o [FILE]              send all query results to file or |pipe
  \qecho [STRING]        write string to query output stream (see \o)
```

Conditional

```
  \if EXPR               begin conditional block
  \elif EXPR             alternative within current conditional block
  \else                  final alternative within current conditional block
  \endif                 end conditional block
```

Informational

```
  (options: S = show system objects, + = additional detail)
  \d[S+]                 list tables, views, and sequences
  \d[S+]  NAME           describe table, view, sequence, or index
  \da[S]  [PATTERN]      list aggregates
  \dA[+]  [PATTERN]      list access methods
  \db[+]  [PATTERN]      list tablespaces
  \dc[S+] [PATTERN]      list conversions
  \dC[+]  [PATTERN]      list casts
  \dd[S]  [PATTERN]      show object descriptions not displayed elsewhere
  \dD[S+] [PATTERN]      list domains
  \ddp    [PATTERN]      list default privileges
  \dE[S+] [PATTERN]      list foreign tables
  \det[+] [PATTERN]      list foreign tables
  \des[+] [PATTERN]      list foreign servers
  \deu[+] [PATTERN]      list user mappings
  \dew[+] [PATTERN]      list foreign-data wrappers
  \df[anptw][S+] [PATRN] list [only agg/normal/procedures/trigger/window] functions
  \dF[+]  [PATTERN]      list text search configurations
  \dFd[+] [PATTERN]      list text search dictionaries
  \dFp[+] [PATTERN]      list text search parsers
  \dFt[+] [PATTERN]      list text search templates
  \dg[S+] [PATTERN]      list roles
  \di[S+] [PATTERN]      list indexes
  \dl                    list large objects, same as \lo_list
  \dL[S+] [PATTERN]      list procedural languages
  \dm[S+] [PATTERN]      list materialized views
  \dn[S+] [PATTERN]      list schemas
  \do[S]  [PATTERN]      list operators
  \dO[S+] [PATTERN]      list collations
  \dp     [PATTERN]      list table, view, and sequence access privileges
  \drds [PATRN1 [PATRN2]] list per-database role settings
  \dRp[+] [PATTERN]      list replication publications
  \dRs[+] [PATTERN]      list replication subscriptions
```

```
  \ds[S+] [PATTERN]      list sequences
  \dt[S+] [PATTERN]      list tables
  \dT[S+] [PATTERN]      list data types
  \du[S+] [PATTERN]      list roles
  \dv[S+] [PATTERN]      list views
  \dx[+]  [PATTERN]      list extensions
  \dy     [PATTERN]      list event triggers
  \l[+]   [PATTERN]      list databases
  \sf[+]  FUNCNAME       show a function's definition
  \sv[+]  VIEWNAME       show a view's definition
  \z      [PATTERN]      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)
  \pset [NAME [VALUE]]   set table output option
                         (NAME := {border|columns|expanded|fieldsep|fieldsep_zero|
                         footer|format|linestyle|null|numericlocale|pager|
                         pager_min_lines|recordsep|recordsep_zero|tableattr|title|
                         tuples_only|unicode_border_linestyle|
                         unicode_column_linestyle|unicode_header_linestyle})
  \t [on|off]            show only rows (currently off)
  \T [STRING]            set HTML <table> tag attributes, or unset if none
  \x [on|off|auto]       toggle expanded output (currently off)

Connection
  \c[onnect] {[DBNAME|- USER|- HOST|- PORT|-] | conninfo}
                         connect to new database (currently "postgres")
  \conninfo              display information about current connection
  \encoding [ENCODING]   show or set client encoding
  \password [USERNAME]   securely change the password for a user

Operating System
  \cd [DIR]              change the current working directory
  \setenv NAME [VALUE]   set or unset environment variable
  \timing [on|off]       toggle timing of commands (currently off)
  \! [COMMAND]           execute command in shell or start interactive shell
```

Variables

\prompt [TEXT] NAME prompt user to set internal variable

\set [NAME [VALUE]] set internal variable, or list all if no parameters

\unset NAME unset (delete) internal variable

Large Objects

\lo_export LOBOID FILE

\lo_import FILE [COMMENT]

\lo_list

\lo_unlink LOBOID large object operations