# Master Notes

Command line on psql:

For conciseness, # is a short of psql command prompt, i.e. Postgres=# ==> this means it's connected to a Postgres database.

Another sample, participantservicedb=# ==> this means it's connected to a participantservicedb database

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# \?

To bring out all the commands (help)

# \h [command]

To display help on syntax of SQL commands, \* for all commands

# \d

List tables, views, and sequences

# \l

List all databases details

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# \c[onnect] {[DBNAME|- USER|- HOST|- PORT|-] | conninfo}

Connect to an (existing) database.



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# \d

List all column properties

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# \dn

List all schemas in a database. Note: schema ==> namespace within a database

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# \dt <schema>.\*

List all tables in the schema specified.

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## SQL commands

$ psql -h localhost -U postgres -d postgresDB -p 5432

From terminal, connect to database (-d) postgresDB, with username (-U) postgres on host (-h) localhost and port (-p) 5432.

$ psql -U postgres pokemon < /tmp/DB.sql

Execute DB.sql via psql: with username 'postgres' and onto database 'pokemon'

# create database pokemon;

Create a new database with the name 'pokemon'

# create table zoo.names (id integer not null primary key, species\_id integer, name varchar, constraint fk\_exhibits foreign key(species\_id) references zoo.exhibits(id));

Sample to create a table (zoo.names) referencing another table (zoo.exhibits) as foreign key.

# select \* from <table\_name>;

View all data from the table specified

# insert into <table\_name> values (…,…) [,(…,…) ,…]

Insert record(s) into a table. For multiple values, use comma separated groups of () as shown above.

# alter table ndc\_agents\_mv add primary key (agent\_code);

Modify a field to be a primary key

# show search\_path;

Postgres will look for items in this path first (in order)

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# set search\_path=<your\_schema>, <exisiting\_search\_path>;

To add your schema (other than public) to be part of search\_path

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# ALTER TABLE <table\_name> ADD CONSTRAINT <constraint\_name> UNIQUE (<columns>);

To modify column to be unique.



# alter table <table\_name> add primary key (<existing\_column>);

To make an existing column a primary key

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# ALTER TABLE <table\_name> RENAME TO <new\_table\_name>;

To rename a table to a new name.

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# ALTER TABLE <table\_name> RENAME [COLUMN] <column\_name> TO <new\_table\_name>;

To rename a column/field of a table.

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# DELETE FROM <table\_name> WHERE id IN (<csv>)

To delete multiple rows



#\i <file\_path>

To execute sql file from psql. NOTE: use '/' for path (UNIX style).



where in the sample below, the sql file contents are:

CREATE TABLE IF NOT EXISTS public.ndc\_agents

(

agent\_code character varying(7) COLLATE pg\_catalog."default" NOT NULL,

check\_digit character varying(1) COLLATE pg\_catalog."default" NOT NULL

)

# \copy <table\_name> to <file\_path> with (format csv, header);

To export table data to csv file.



# update <table\_name> where <column>=<’value’>;

To modify a record.