Creating and Loading a Spatial Database

1. Install psql and postGIS

- **Mac**

Postgres.app

- **Linux**

- PostgreSQL
- PostGIS

2. **Create a database and connect to it**

```
~> createdb --owner lucia --password nyc
[ createdb -0 lucia -W nyc ]


~> psql --dbname=nyc
[ Or \c nyc from psql prompt ]
[ \l to list all ]
```

3. **Enable spatial support**

```
=# CREATE EXTENSION postgis;

=# SELECT postgis_full_version();
```

4. Create sql load commands from shape files

```
~> mkdir sqlloads


~> shp2pgsql -I -s 26918 data/nyc_census_blocks.shp nyc_census_blocks
> sqlloads/nyc_census_blocks.sql


~> shp2pgsql -I -s 26918 data/nyc_neighborhoods.shp nyc_neighborhoods
> sqlloads/nyc_neighborhoods.sql


~> shp2pgsql -I -s 26918 data/nyc_streets.shp nyc_streets >
sqlloads/nyc_streets.sql


~> shp2pgsql -I -s 26918 data/nyc_subway_stations.shp
nyc_subway_stations > sqlloads/nyc_subway_stations.sql
```

5. **Load spatial data into db**

```
~> psql -U lucia -d nyc -f sqlloads/nyc_census_blocks.sql

~> psql -U lucia -d nyc -f sqlloads/nyc_neighborhoods.sql

~> psql -U lucia -d nyc -f sqlloads/nyc_streets.sql

~> psql -U lucia -d nyc -f sqlloads/nyc_subway_stations.sql

~> psql -U lucia -d nyc -f data/nyc_census_sociodata.sql
```