

Tugas1

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Kelas : Sistem Informasi Geografis

Link Github : https://github.com/gymnastiarsyahputra/Tugas-SIG_123140135.git

Deskripsi Tugas :

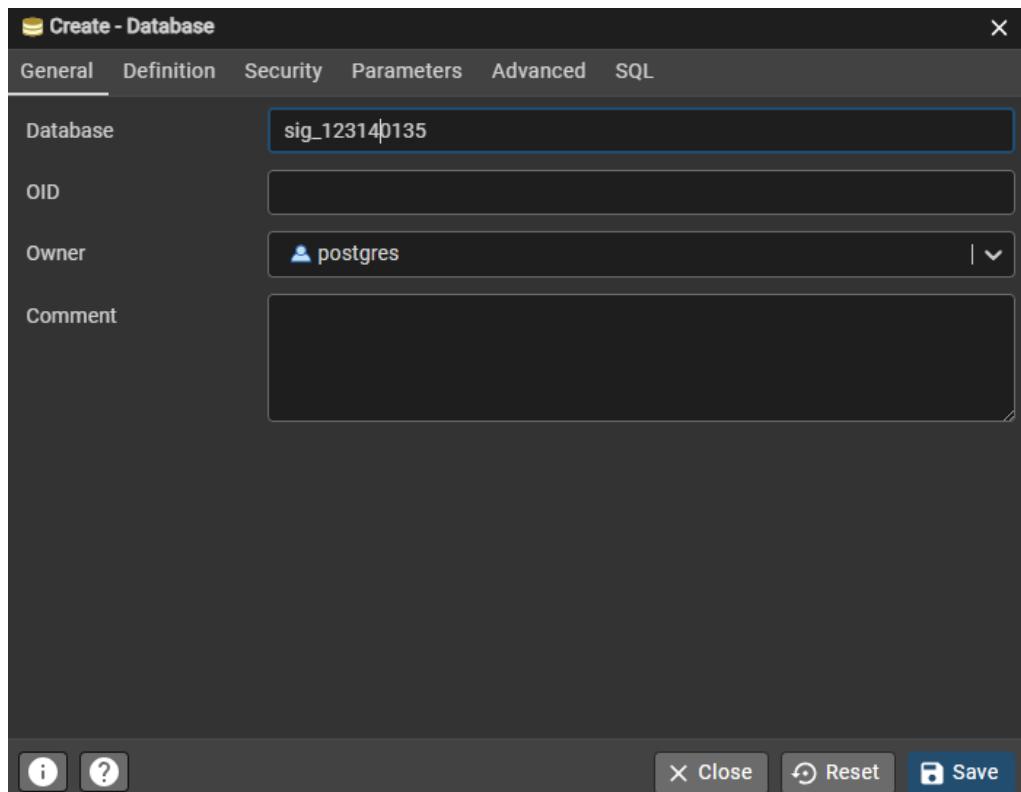
Lakukan instalasi PostgreSQL dan PostGIS di komputer masing-masing. Kemudian buat database dengan nama sig_[nim] dan masukkan minimal 5 data lokasi fasilitas publik di sekitar tempat tinggal Anda (sekolah, masjid, puskesmas, dll)

Ketentuan Tugas:

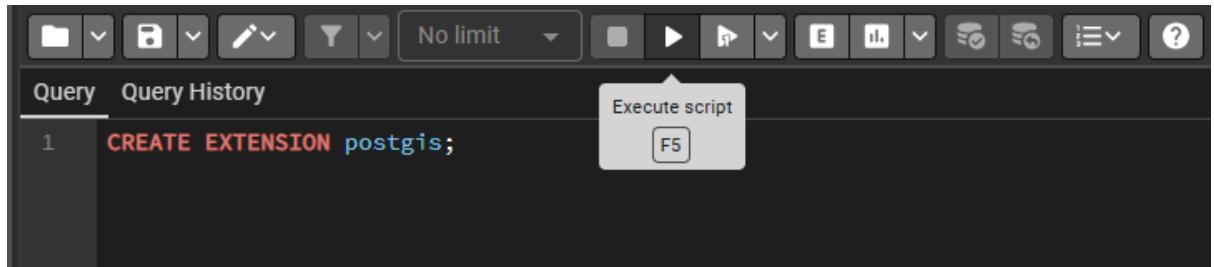
- Buat tabel dengan struktur: id, nama, jenis, alamat, geom
- Koordinat dapat diambil dari Google Maps (klik kanan > koordinat)
- Screenshot hasil query SELECT dengan ST_AsText(geom)
- Screenshot tampilan data di QGIS

Langkah-langkah :

1. Buat database

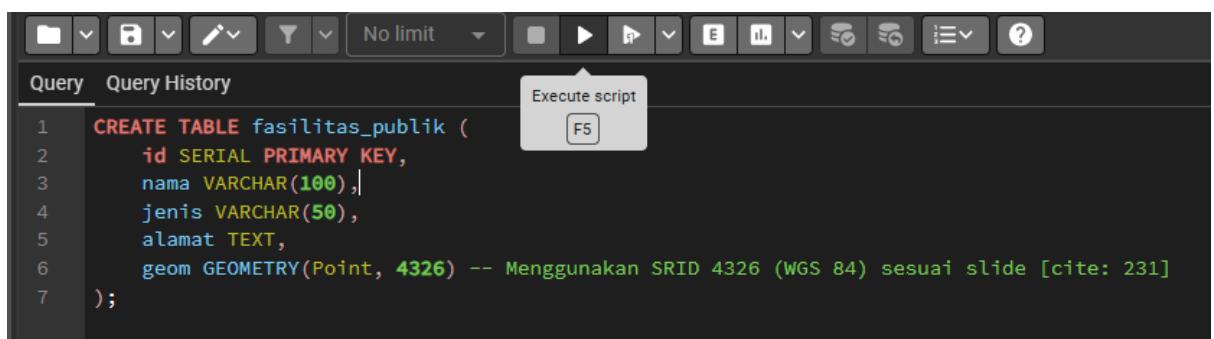


2. Install extension postgis



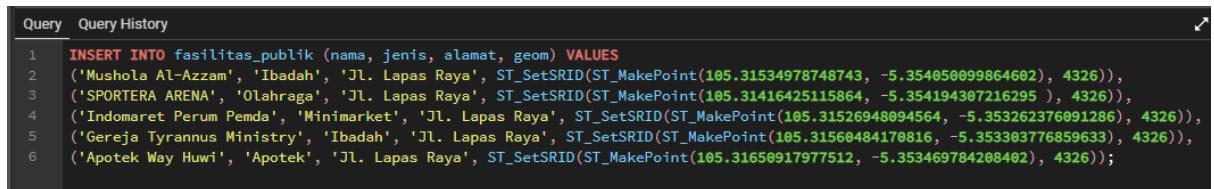
```
Query Query History
1 CREATE EXTENSION postgis;
Execute script F5
```

3. Buat table fasilitas_publik



```
Query Query History
1 CREATE TABLE fasilitas_publik (
2     id SERIAL PRIMARY KEY,
3     nama VARCHAR(100),
4     jenis VARCHAR(50),
5     alamat TEXT,
6     geom GEOMETRY(Point, 4326) -- Menggunakan SRID 4326 (WGS 84) sesuai slide [cite: 231]
7 );
```

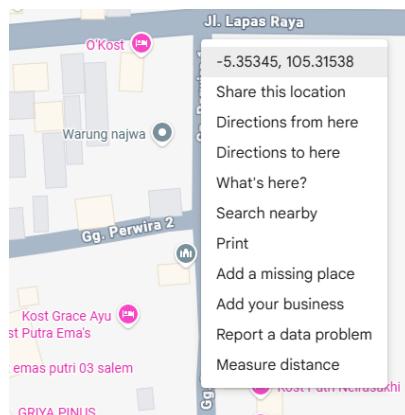
4. Insert data fasilitas_publik



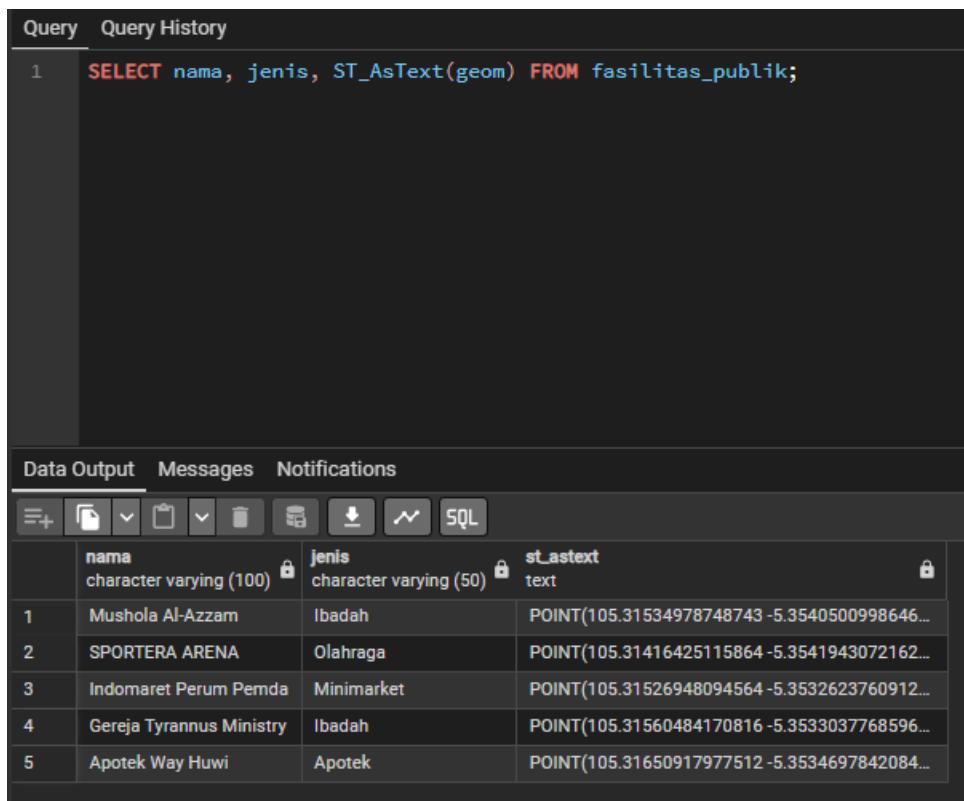
```
Query Query History
1 INSERT INTO fasilitas_publik (nama, jenis, alamat, geom) VALUES
2 ('Mushola Al-Azzam', 'Ibadah', 'Jl. Lapas Raya', ST_SetSRID(ST_MakePoint(105.31534978748743, -5.354050099864602), 4326)),
3 ('SPORTERA ARENA', 'Olahraga', 'JL. Lapas Raya', ST_SetSRID(ST_MakePoint(105.31416425115864, -5.354194387216295 ), 4326)),
4 ('Indomaret Perum Pemda', 'Minimarket', 'Jl. Lapas Raya', ST_SetSRID(ST_MakePoint(105.31526948094564, -5.353262376091286), 4326)),
5 ('Gereja Tyrannus Ministry', 'Ibadah', 'Jl. Lapas Raya', ST_SetSRID(ST_MakePoint(105.31560484170816, -5.353303776859633), 4326)),
6 ('Apotek Way Huwi', 'Apotek', 'Jl. Lapas Raya', ST_SetSRID(ST_MakePoint(105.31650917977512, -5.353469784208402), 4326));
```

Catatan :

Cara ambil koordinat Longitude Latitude di gmaps adalah dengan klik kanan pada area yang ingin diambil Longitude Latitude lalu ambil angka Latitude, Longitude). Lalu rubah format menjadi (Longitude, Latitude) untuk dimasukkan ke query database.



5. Tampilkan table hasil fasilitas_publik



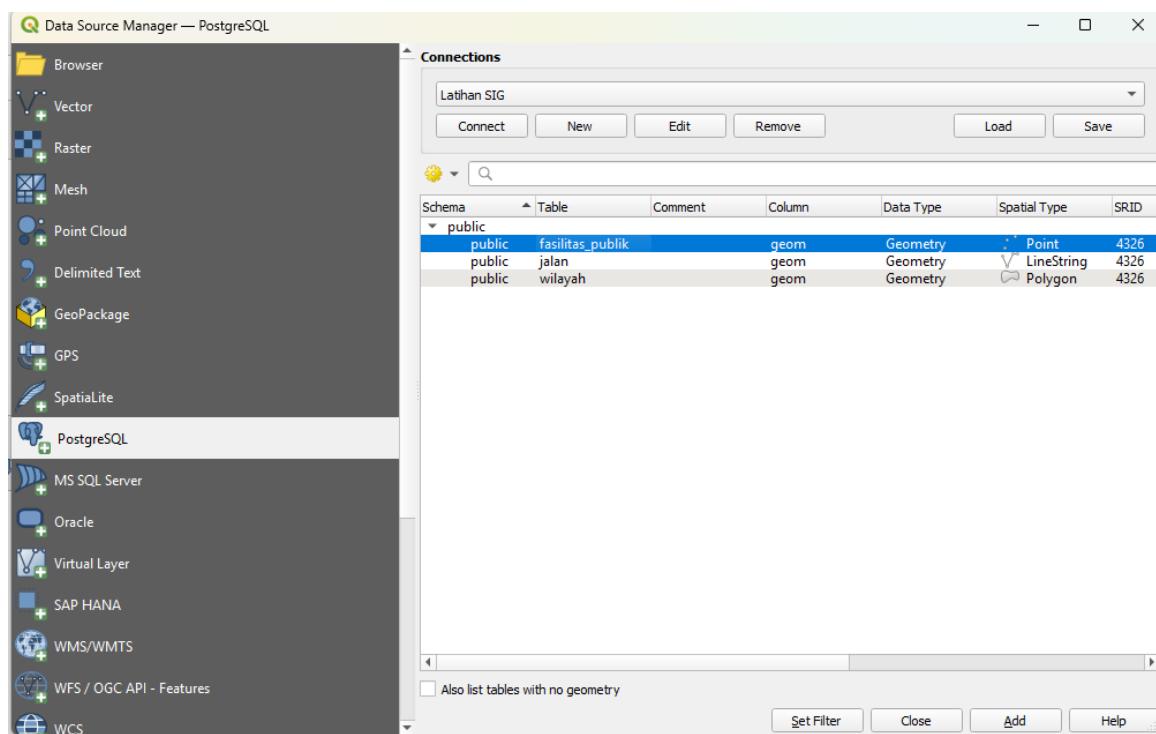
The screenshot shows a PostgreSQL client interface with a query editor and a data viewer. The query editor at the top contains the following SQL code:

```
1  SELECT nama, jenis, ST_AsText(geom) FROM fasilitas_publik;
```

The data viewer below displays the results of the query. The table has three columns: 'nama' (character varying (100)), 'jenis' (character varying (50)), and 'st_astext' (text). The data is as follows:

	nama	jenis	st_astext
1	Mushola Al-Azzam	Ibadah	POINT(105.31534978748743 -5.3540500998646...)
2	SPORTERA ARENA	Olahraga	POINT(105.31416425115864 -5.3541943072162...)
3	Indomaret Perum Pemda	Minimarket	POINT(105.31526948094564 -5.3532623760912...)
4	Gereja Tyrannus Ministry	Ibadah	POINT(105.31560484170816 -5.3533037768596...)
5	Apotek Way Huwi	Apotek	POINT(105.31650917977512 -5.3534697842084...)

6. Tambahkan layer ke QGIS



7. Cek hasilnya

