JSON, Spatial, Graph – Multi-model Workloads with SAP HANA Cloud

Demo Scenario

London

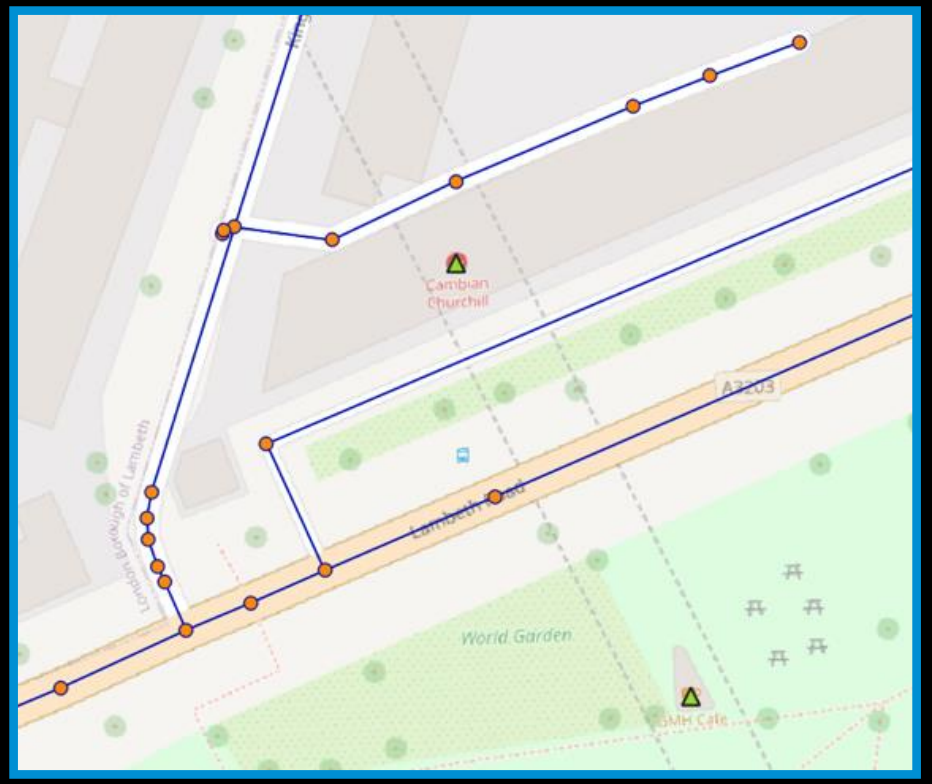
- Analyze **Points of Interest** (POI) locations and distribution
- Calculate POI relations, distance, and reachability based on the **street network**

Utility Networks, e.g. power grids

- Analyze **assets**, failures and work orders
- Calculate dependencies and simulate impact of maintenance work in a **utility network**

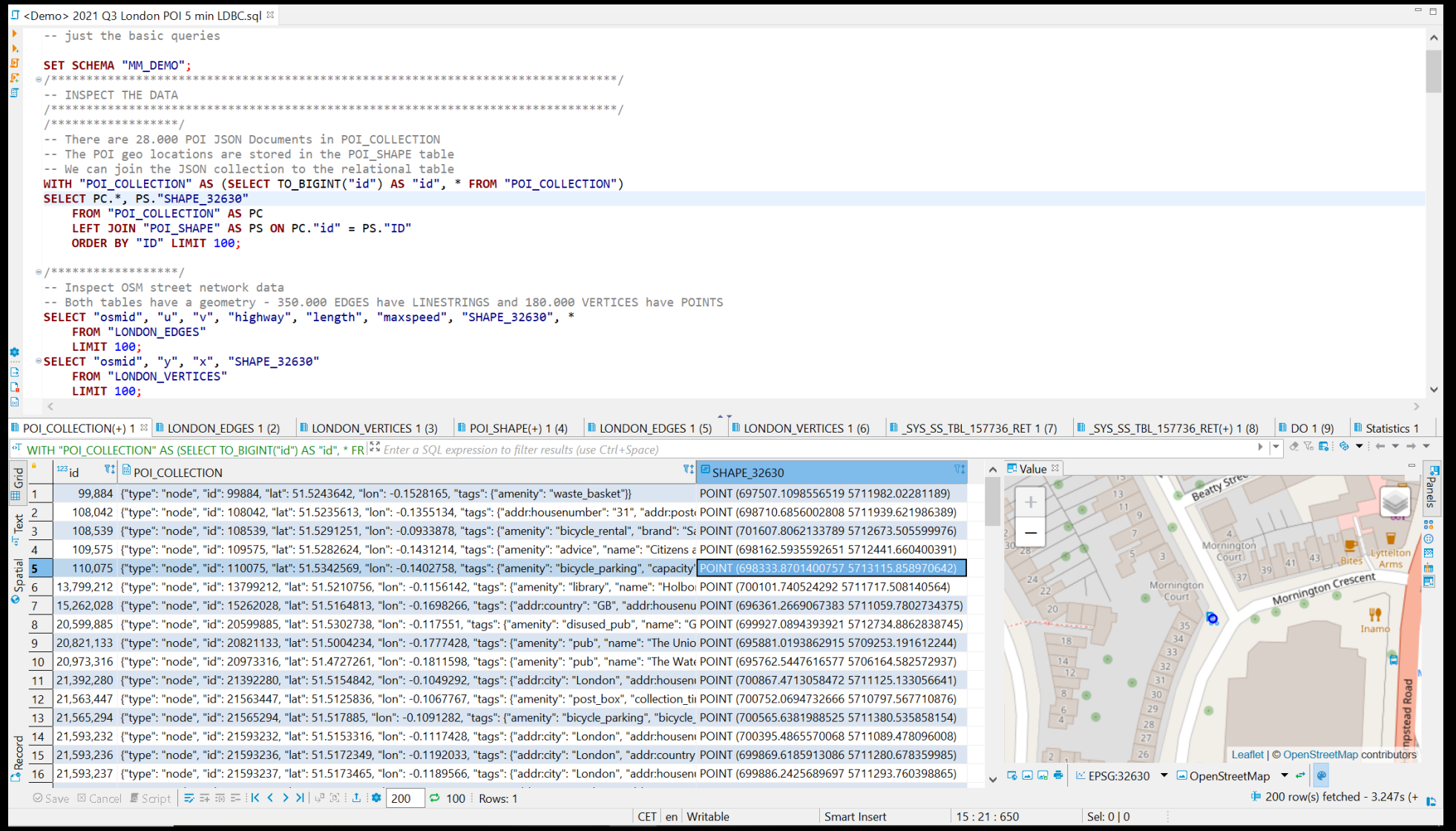
Supply and production networks

- Analyze and plan **material** supply and production
- Identify risks and alternative “**routes**” in case of supply shortage and production failures

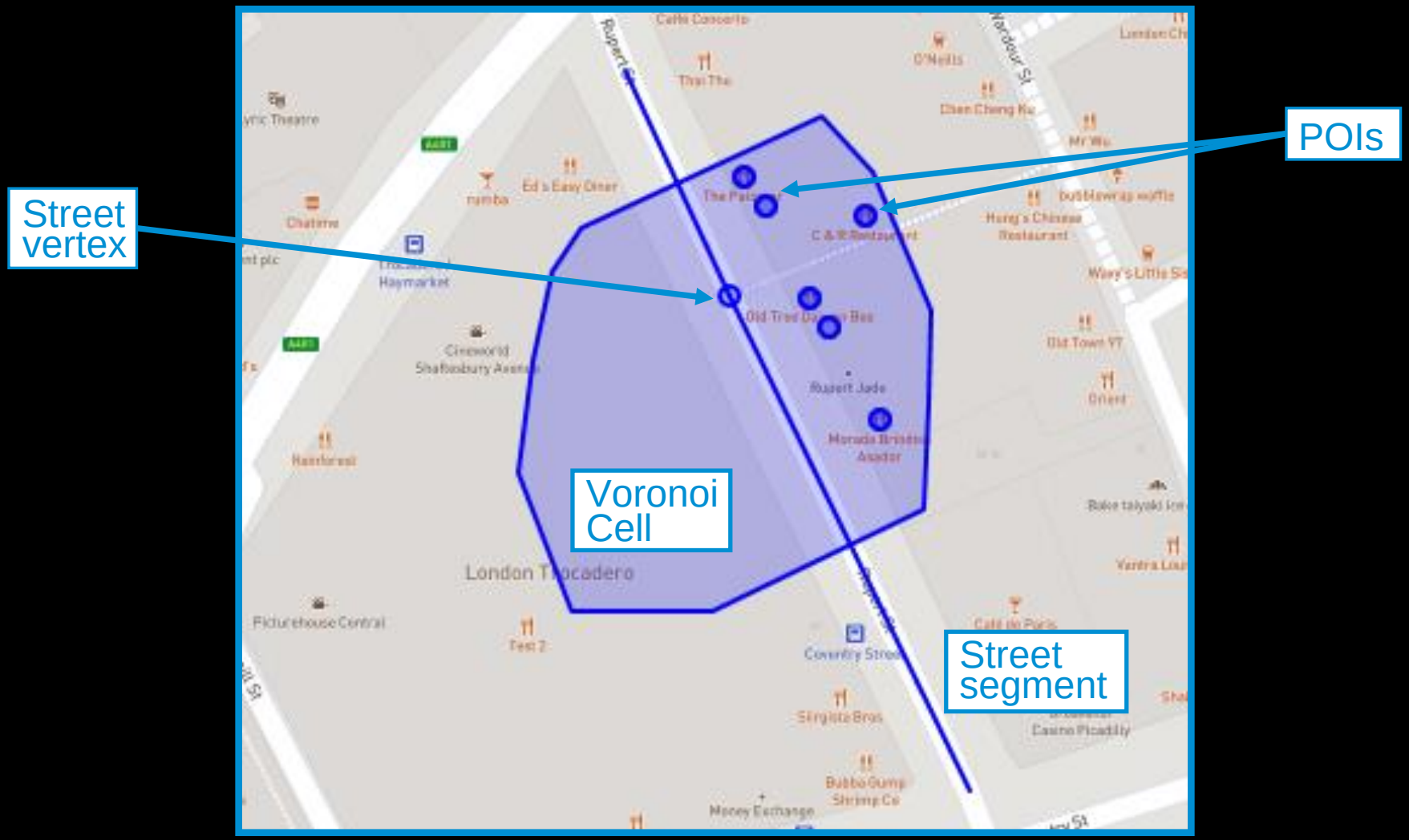


Street network, POIs

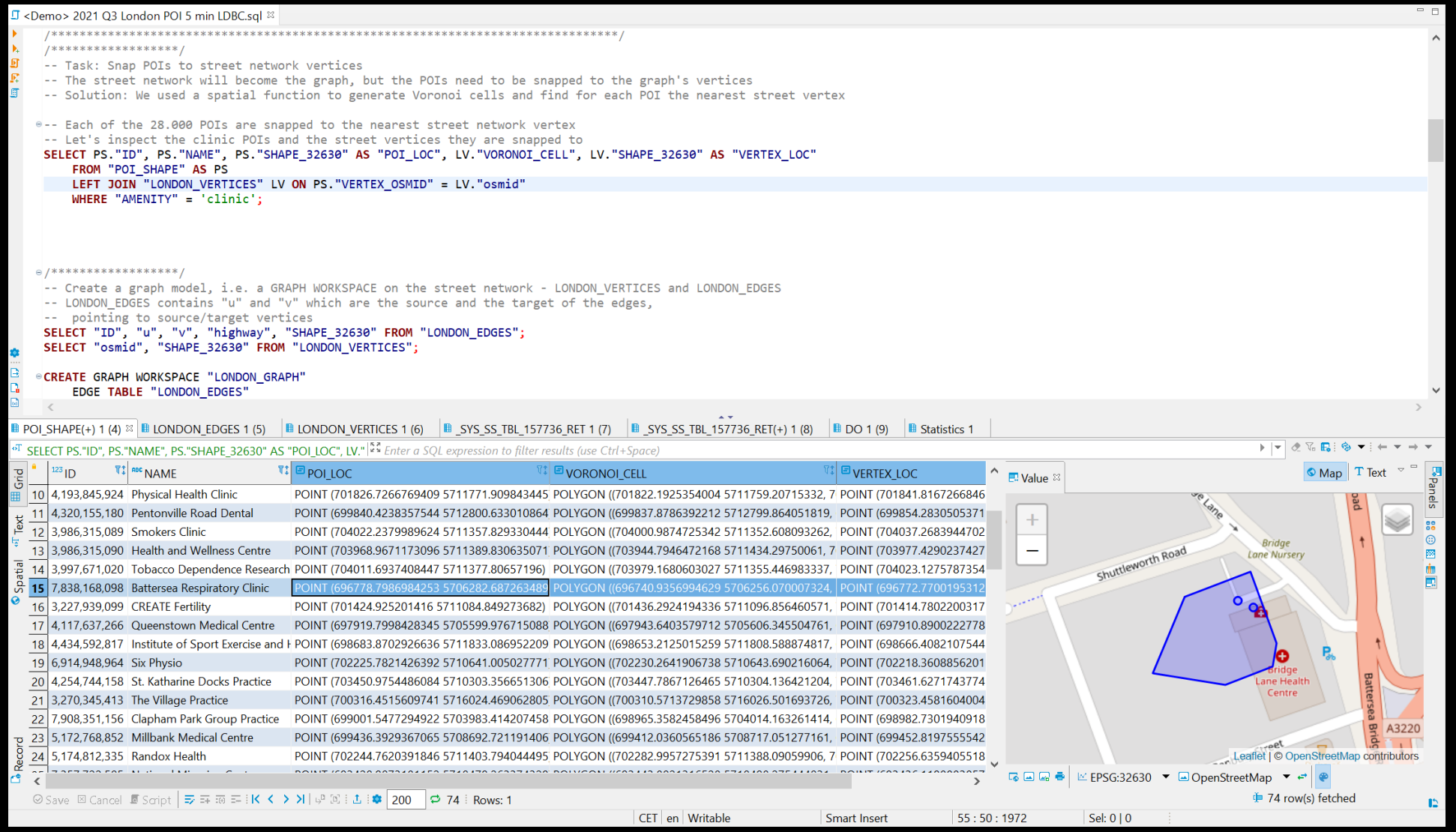
Points of Interest (POI) that Enrich Spatial Graph Data



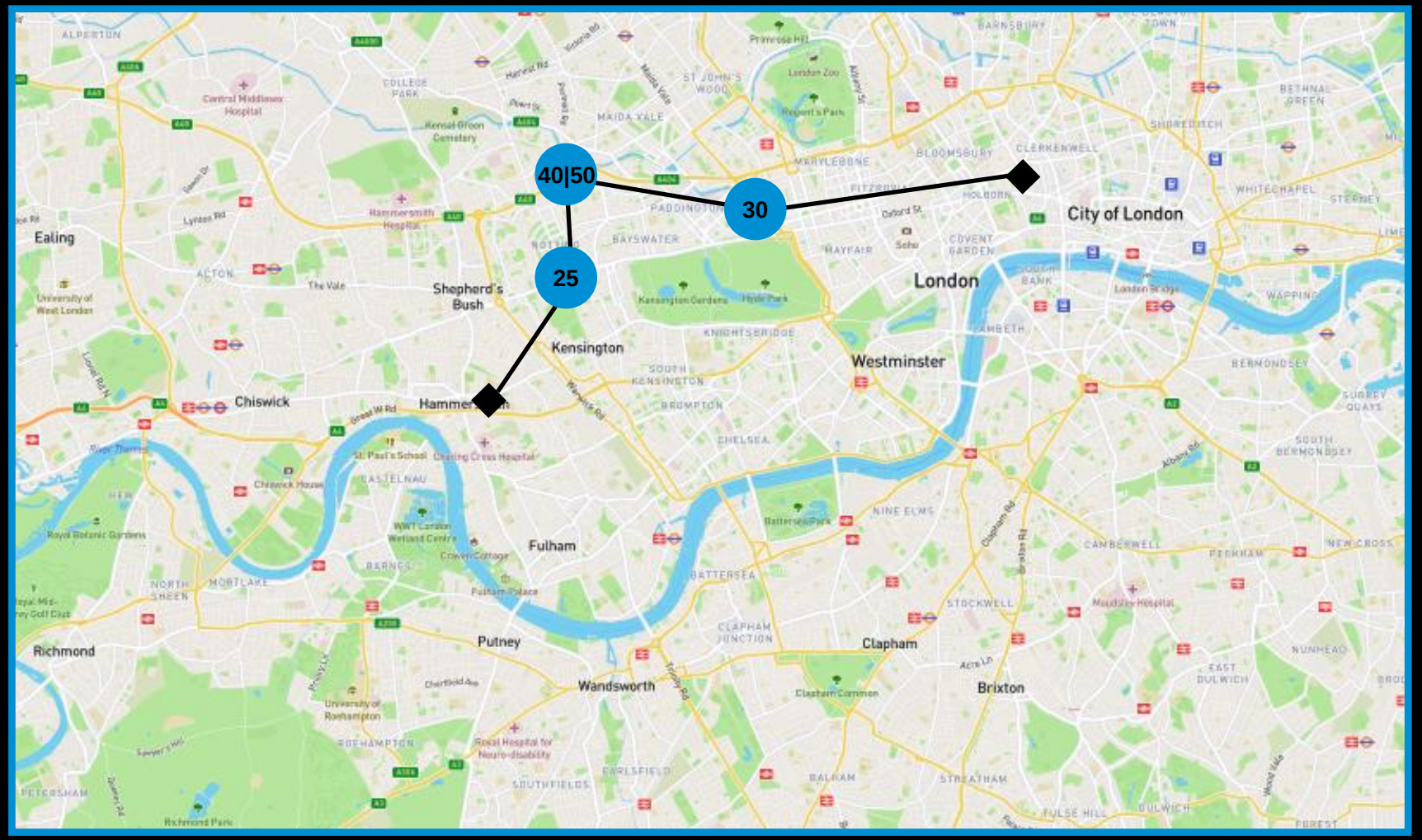
Snap POIs to Street Network Vertices



Snap POIs to Street Network Vertices



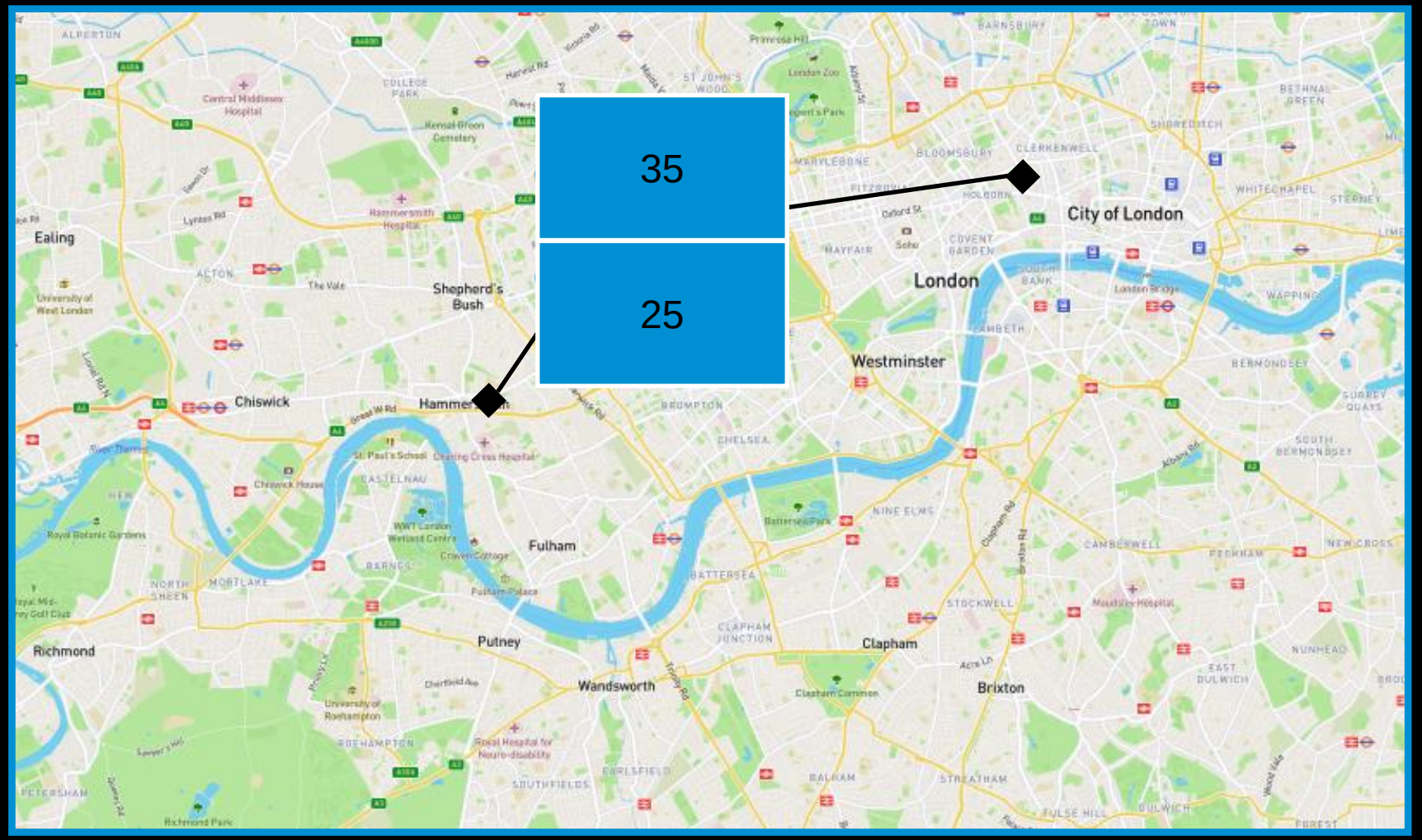
Isochrone Map



1 select POIs

2 calculate drive time distances

Isochrone Map



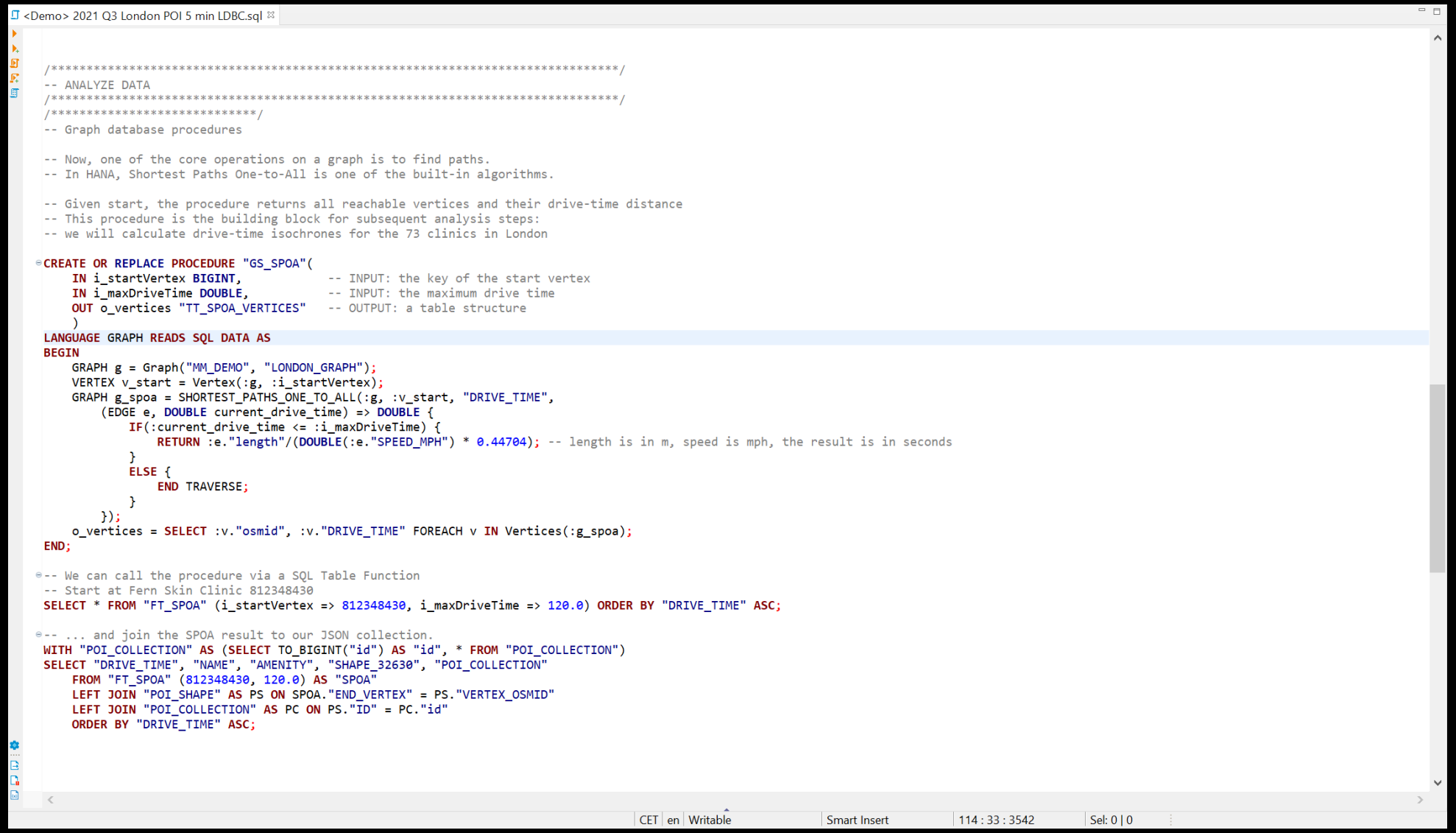
1 select POIs

2 calculate drive time distances

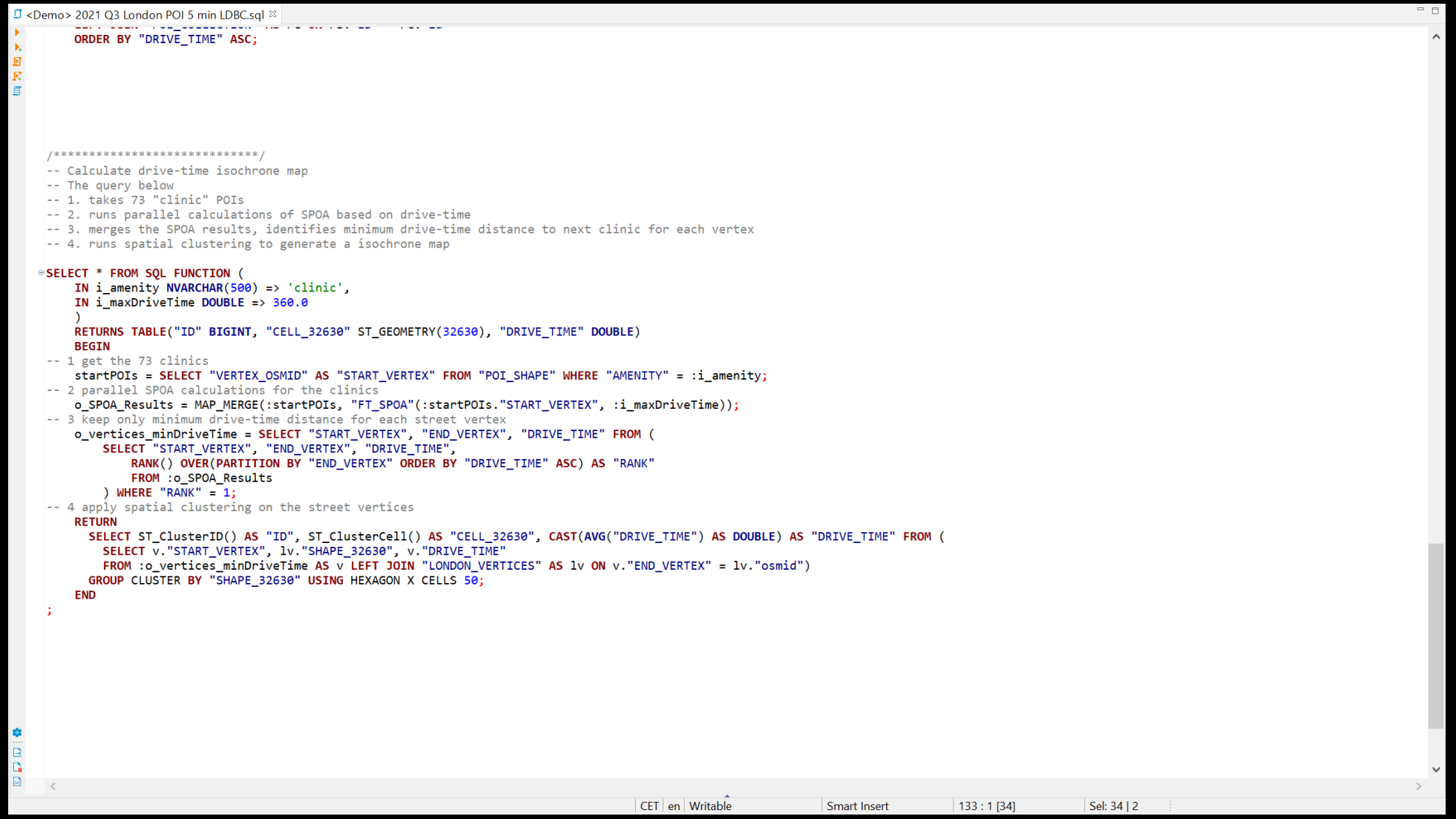
3 select min distance for each vertex

4 spatial clustering and calculate average

Calculation of Drive-Time Distances using GraphScript



Calculate Drive-Time Isochrone Map



Drive-Time Isochrones for 73 Clinics in London