



# INSTITUTO SUPERIOR TÉCNICO

## INFORMATION SYSTEMS AND DATABASES

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### Project

Part 2

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**Group 38 - Shift a\_SIBD77L05**  
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## Comments

### Translation to SQL

There are three Integrity Constraints that we didn't represent in SQL, IC-1, IC-2 and IC-5. The first two were because of the constraints of the project, but it would be possible to represent them in SQL. As for IC-5, we didn't find any way for it to be represented in SQL.

### Database Loading

It was assumed that the elements adhered to the following notation: "B-000" for bus bars, "T-000" for transformers and "L-000" for line.

### SQL Queries

We wrote query A to make sure that if there are two people with the same name that have analysed B-789, they are both represented in the result.

In the second query, although it is not specified in the project description, it is assumed that if various analysts have reported the same number of incidents, they are all meant to be returned by the query.

Query C returns both the name and the GPS coordinates for the substations with more than one transformer.