

# PL/pgSql Functions

## Databases 2022

# Exercise 1

- From DVD rental database Table address have column address as text (you want to convert address to Longitude/latitude and create new two columns in address table).
- Steps:
  - Create Function to retrieve addresses that contains “11” and city\_id between 400-600.
  - [Call the function](#) from [Python script](#) and use [geoPy](#) to generate longitude and latitude and Create Query to update Address table with new values.
  - Any area that geoPy not recognize put 0,0 for both values.
  - Submit you python code/output query for Address Table/SQL Query with screenshots for Database function. (prefer README.md file)

# Exercise 2

- In Customer Table we have less than 600 customers and you don't have backend developer to do paging.. Your job is to create function to retrieve customers order by address\_id and it will take two parameters (start,end).
- For example: retrievecustomers(10,40):
  - 10 is customer number 10 in the query.
  - If start or end is negative number or more than 600 show an error message describe the error.
- Submit SQL query to create the function with example.

# Useful resources

- [https://www.linuxtopia.org/online\\_books/database\\_guides/Practical\\_PostgreSQL\\_database/PostgreSQL\\_x20238\\_002.htm](https://www.linuxtopia.org/online_books/database_guides/Practical_PostgreSQL_database/PostgreSQL_x20238_002.htm)
- <https://www.postgresqltutorial.com/plpgsql-loop-statements/>
- <https://www.educba.com/postgresql-for-loop/?source=leftnav>
- <https://www.postgresqltutorial.com/plpgsql-for-loop/>
- <https://kb.objectrocket.com/postgresql/postgres-if-statement1351>

**See you next lab :)**