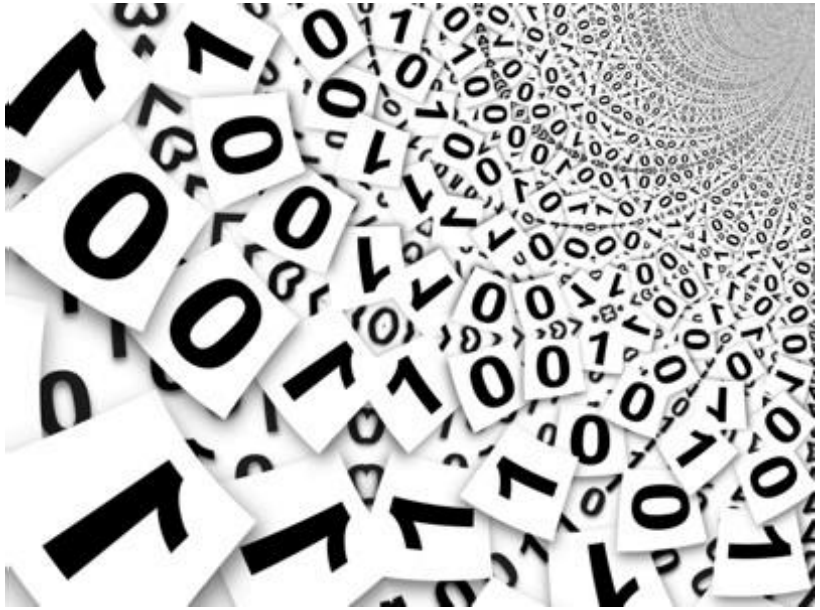
Technische Universität Berlin

Geo-Databases - EXERCISE

Introduction



Izabela Karut and Andreas Fuls

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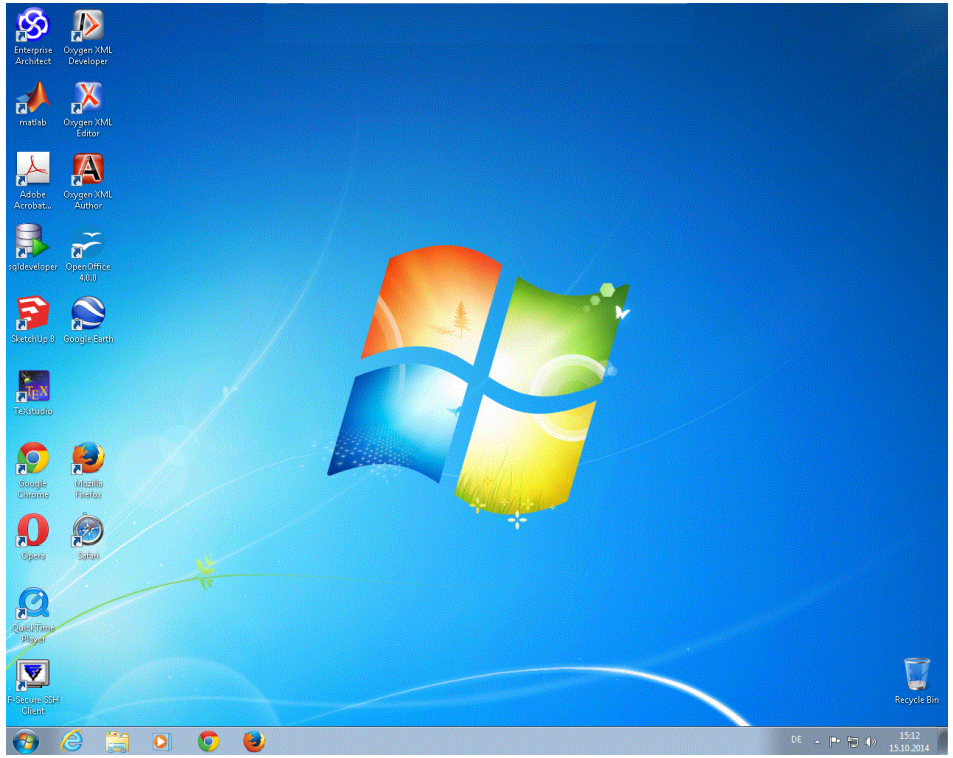
Technische Universität Berlin

About the course

- Contact: Izabela Karut
  - Email: Izabela.Karut@tu-berlin.de
  - Room: H 6118
  - Office hours: Monday 14:00 – 16:00 and by arrangement
- Contact: Andreas Fuls
  - Email: Andreas.Fuls@tu-berlin.de
  - Room: H 6106
  - Office hours: by arrangement
- Course schedule:
  - Lecture: Monday, 16:00 – 18:00 (H 6131)
  - Exercise: Thursday, 12:00 – 14:00 Group A,
14:00 – 16:00 Group B
  - Room: GIS lab, H 6134

GIS Lab

Info about AFS: Quick Access: 78548



Don‘t store data
on Desktop !!!
Will be deleted during logout !

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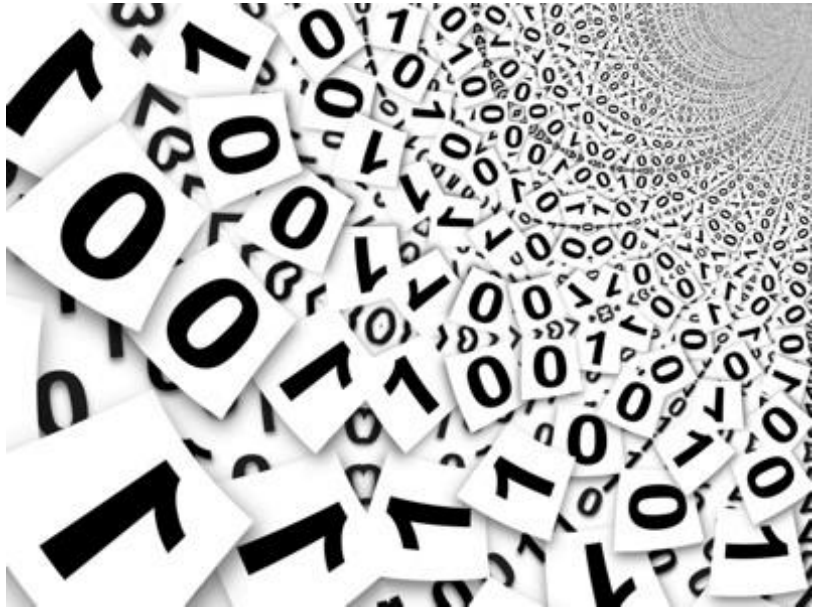
Geo-Databases

Connecting with PostgreSQL



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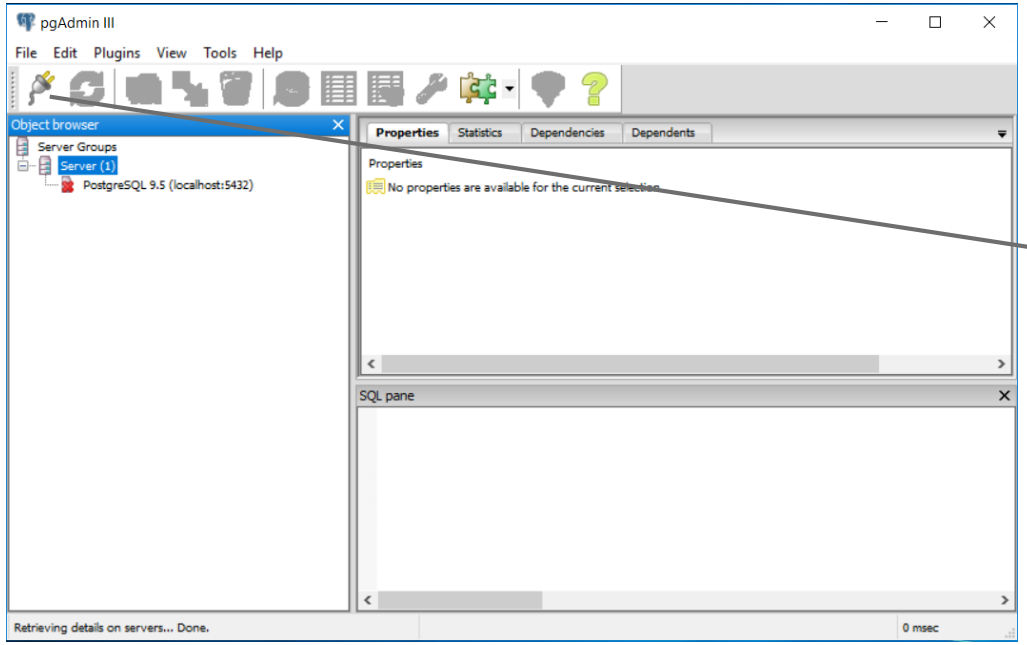
PostgreSQL and pgAdmin

PostgreSQL is a open source object-relational database system. The purpose of a database is to store and retrieve related information.

pgAdmin is a PostgreSQL Tool to get access to the database. Any data querying and manipulation can be done using pgAdmin.

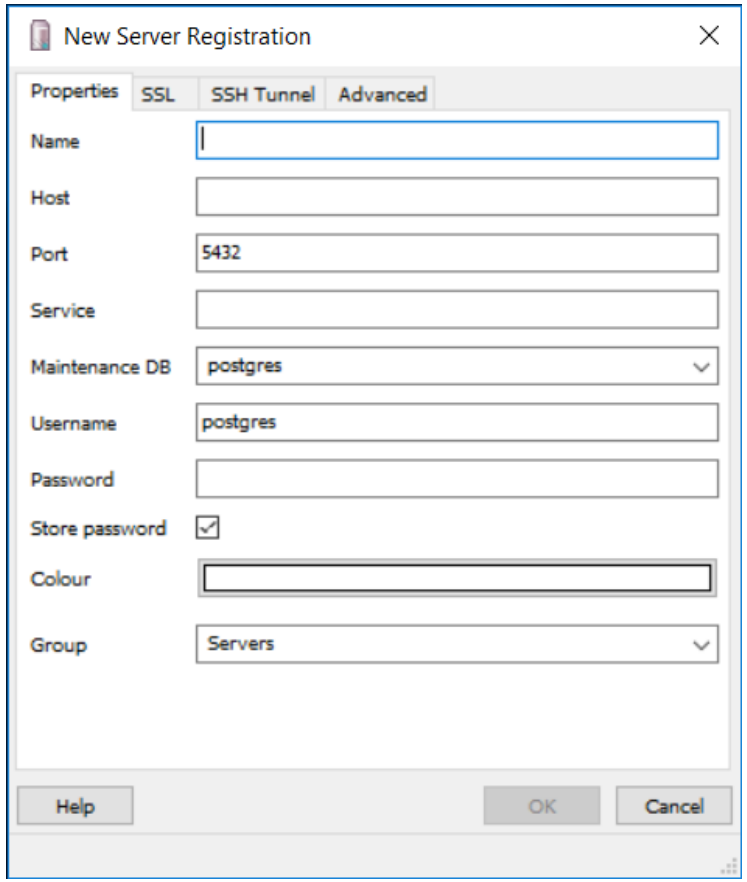
pgAdmin

To use PostgreSQL you need to connect through pgAdmin with the Database (DB):



Right-click on the *Connection* symbol and add a new connection.

Connecting with the server



Specify the connection settings as follows:

Name:	„whatever you want“
Host:	igghost
Username:	student
Password:	student

Test if your connection is successful.

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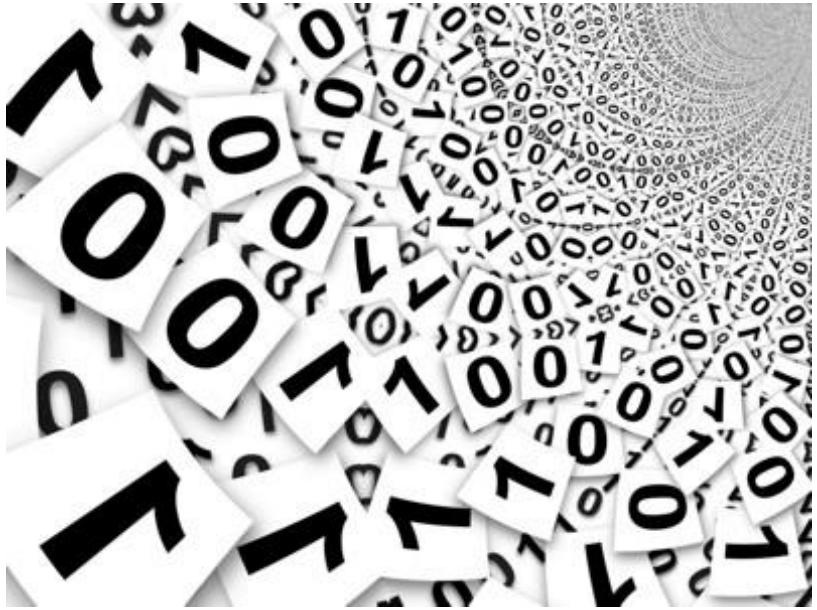
Geo-Databases

Exercise 1: Relational Databases



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1. Import Excel data into PostgresSQL

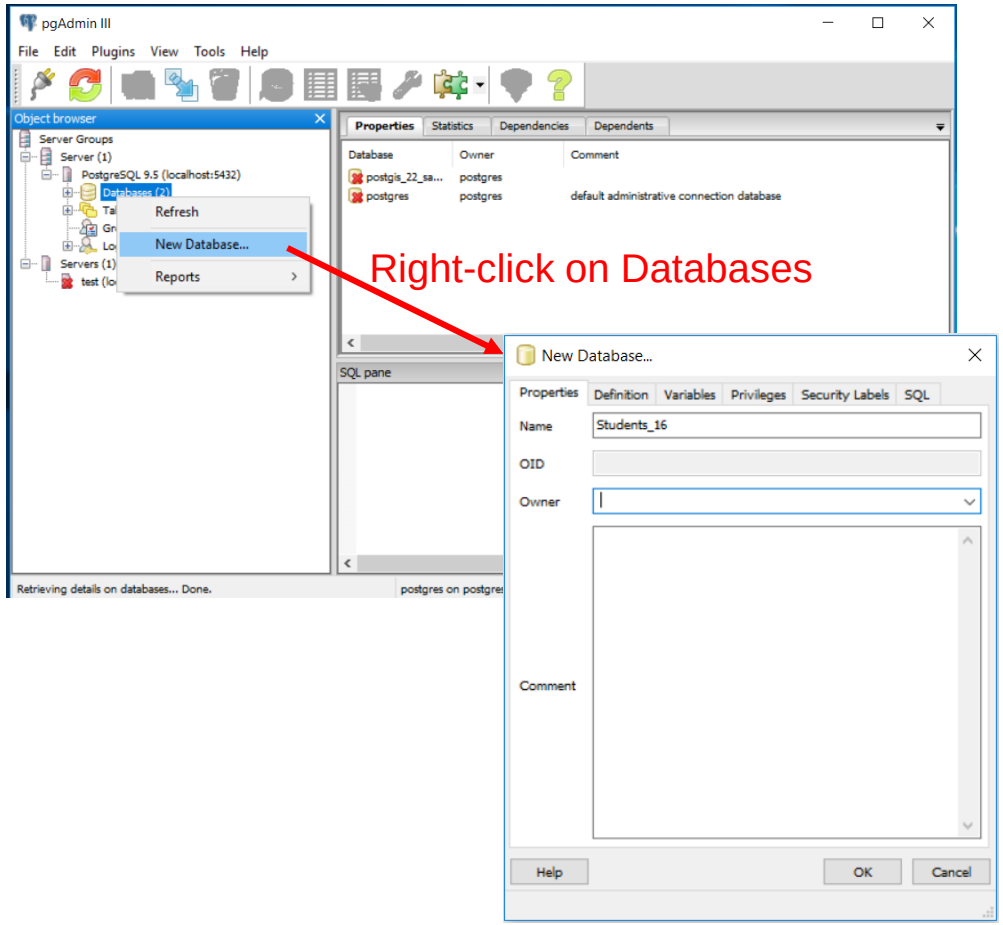
In the lecture we collected your personal information that was stored as MS Excel file. The Excel table contains 8 columns:

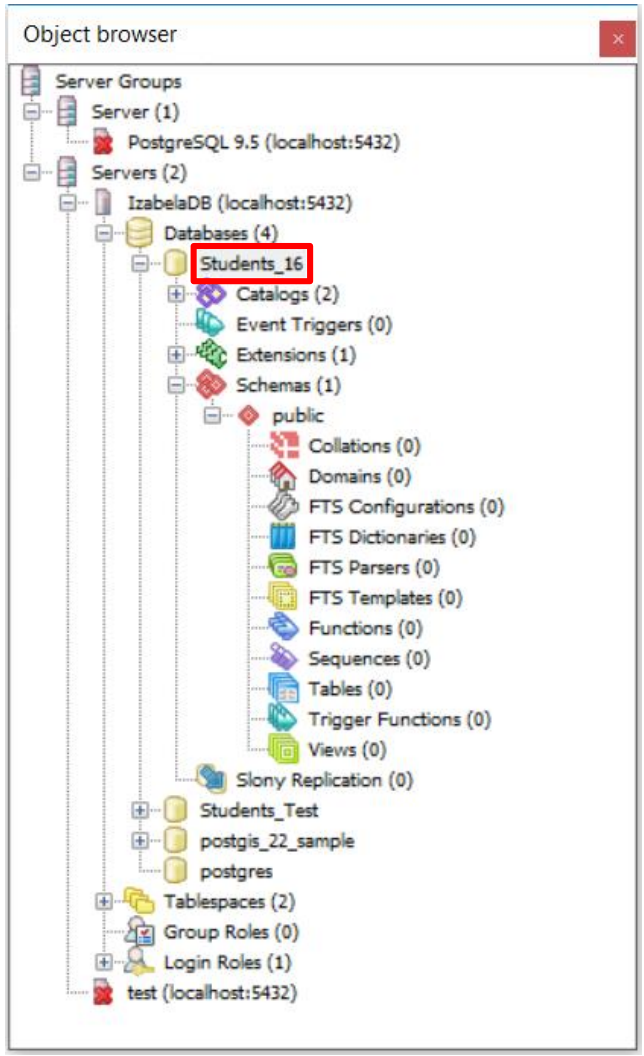
GENDER, LASTNAME, FIRSTNAME, AGE, COUNTRY, NBC (next bigger city), HOBBIES, BACHELOR (degree), SPEZIALIZATION (in which field you think you want to focus on)

Now we want to put our data into the Database. Therefore we need to:

1. crate a new database
2. create a new table
3. copy the data from our .csv file into our new table

Create a new database





Create a new table

There are two ways to create a new table:

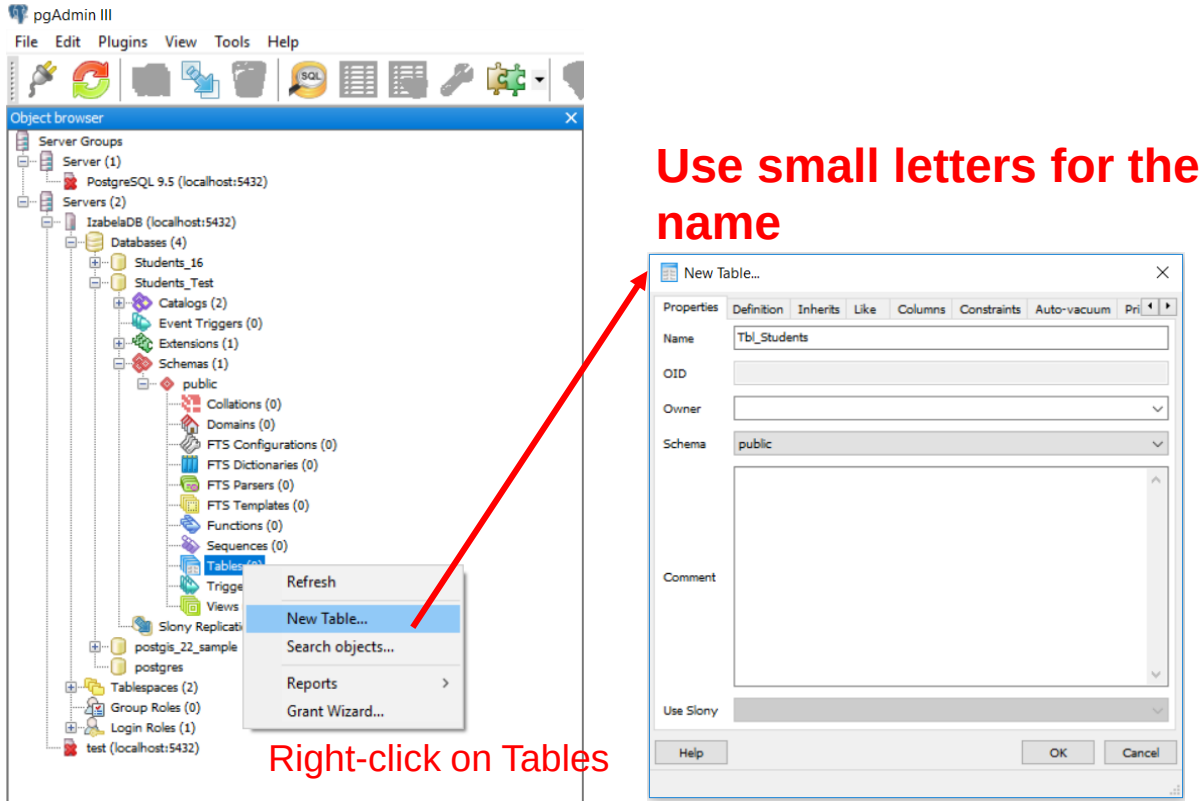
1. To use the pgAdmin GUI
2. To use a SQL command

Please make sure, that the columns have the same name as the .csv table „Students_16“ that you downloaded from ISIS:

GENDER,
LASTNAME,
FIRSTNAME,
AGE,
COUNTRY,
NBC (next bigger city),
HOBBIES,
BACHELOR (degree),
SPECIALIZATION (in which field you think you want to focus on)

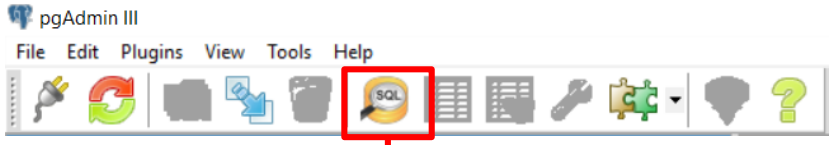
Create a new table

New table using pgAdmin GUI

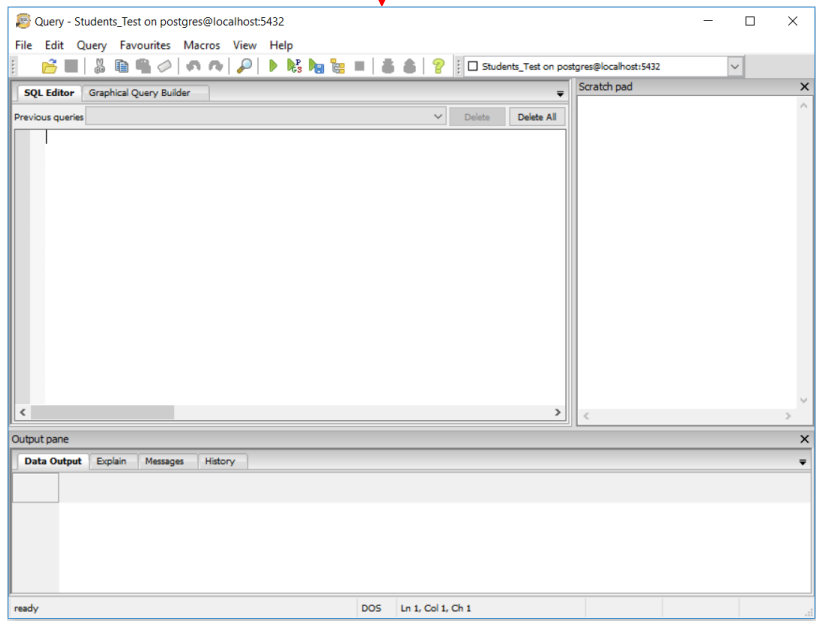


Use small letters for the name

New table using SQL commands

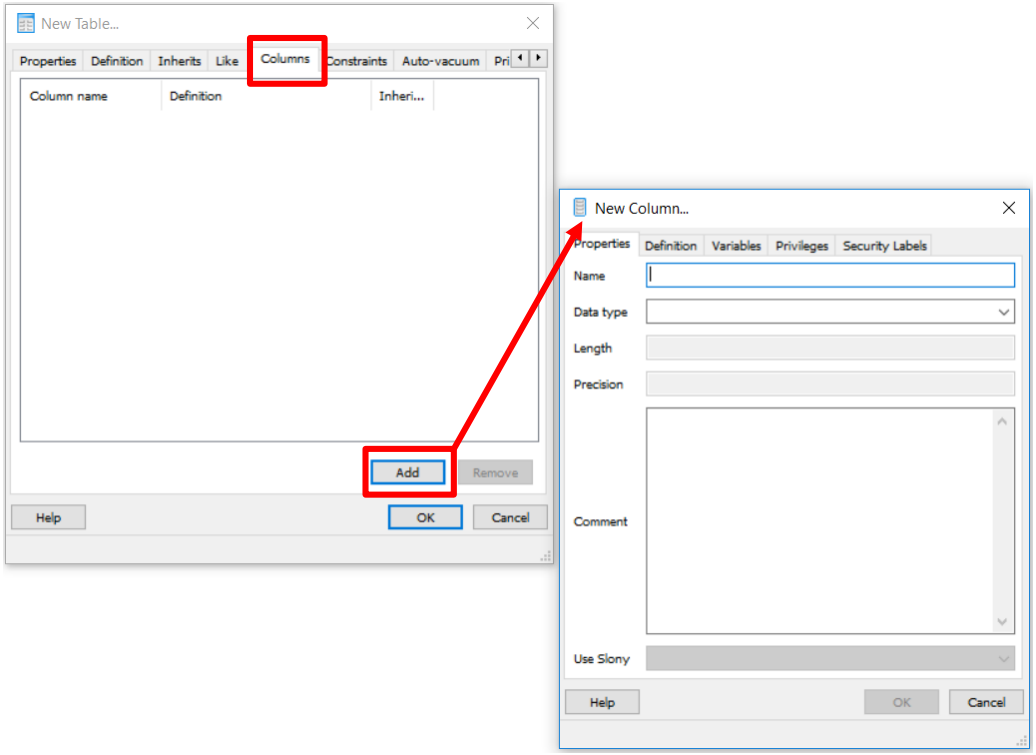


Open the SQL Editor



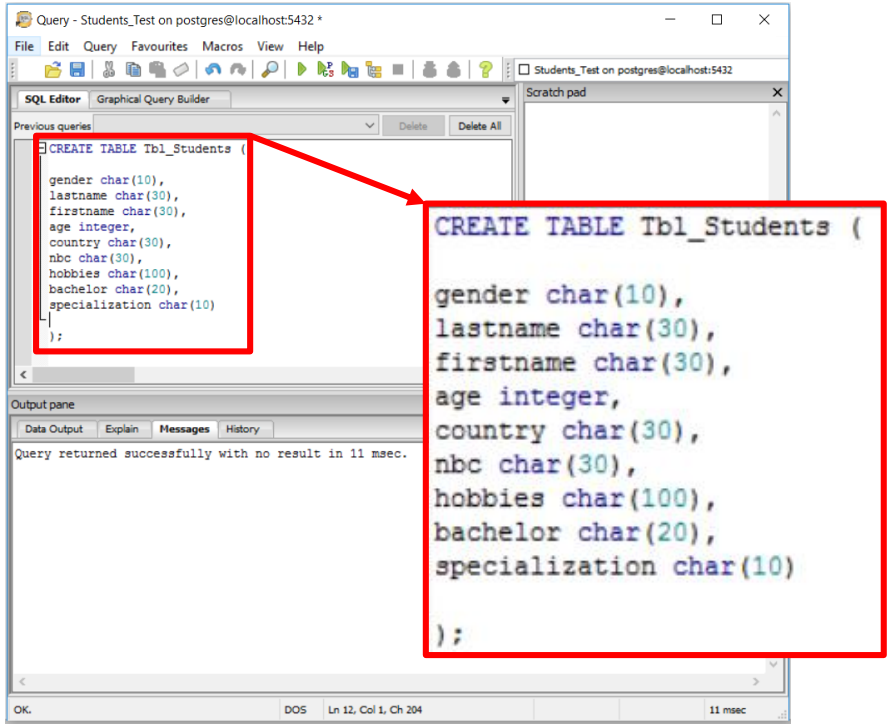
Create a new table

New table using pgAdmin GUI



New table using SQL command

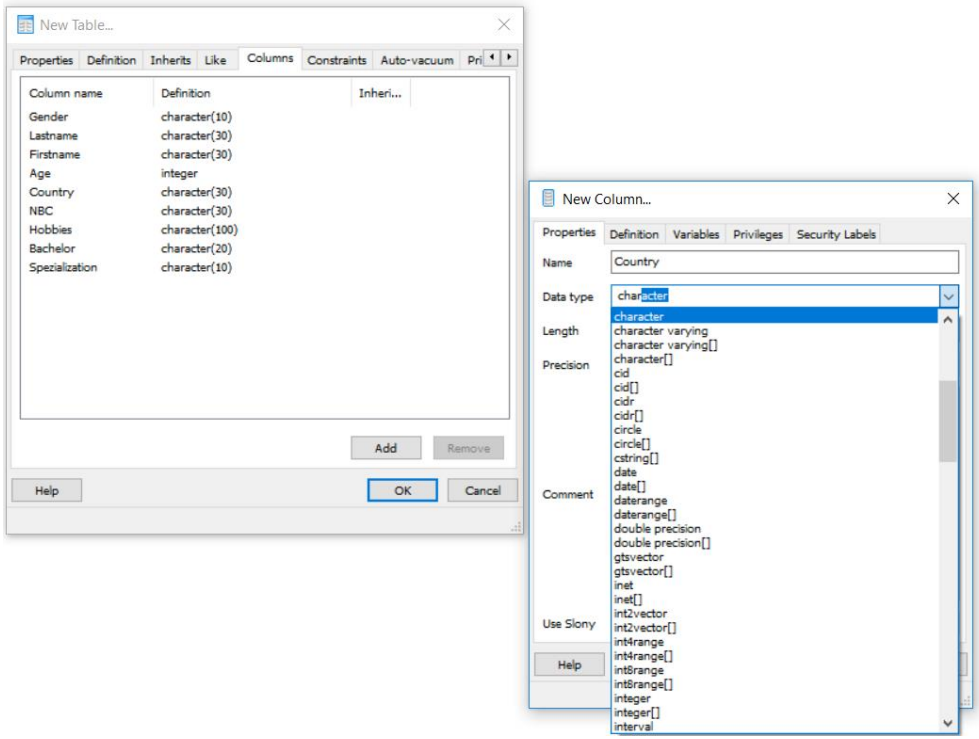
Type in the SQL command



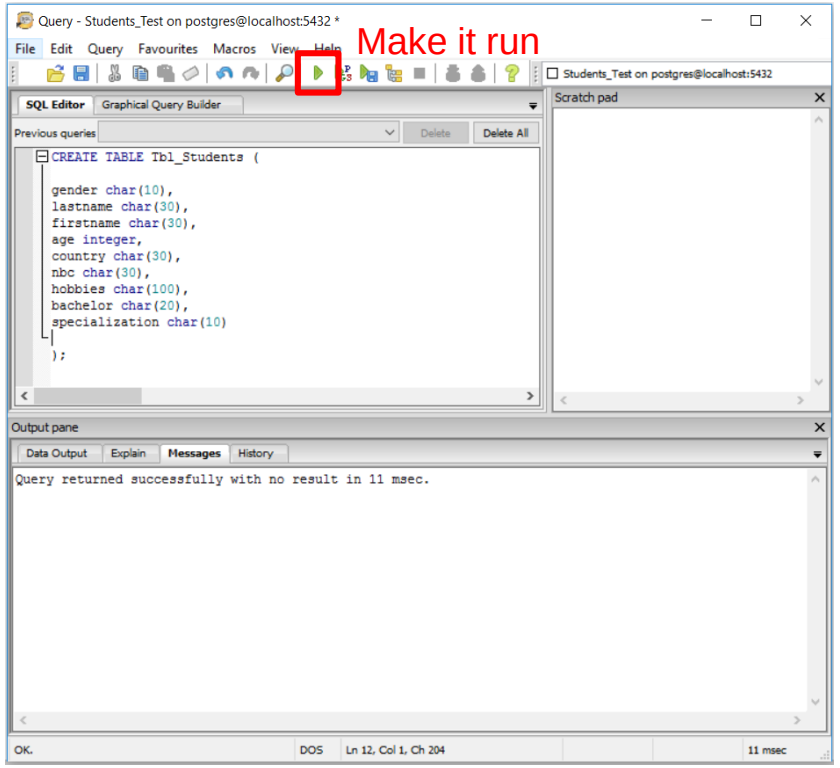
Create a new table

New table using pgAdmin GUI

Add all necessary columns to the table and click OK

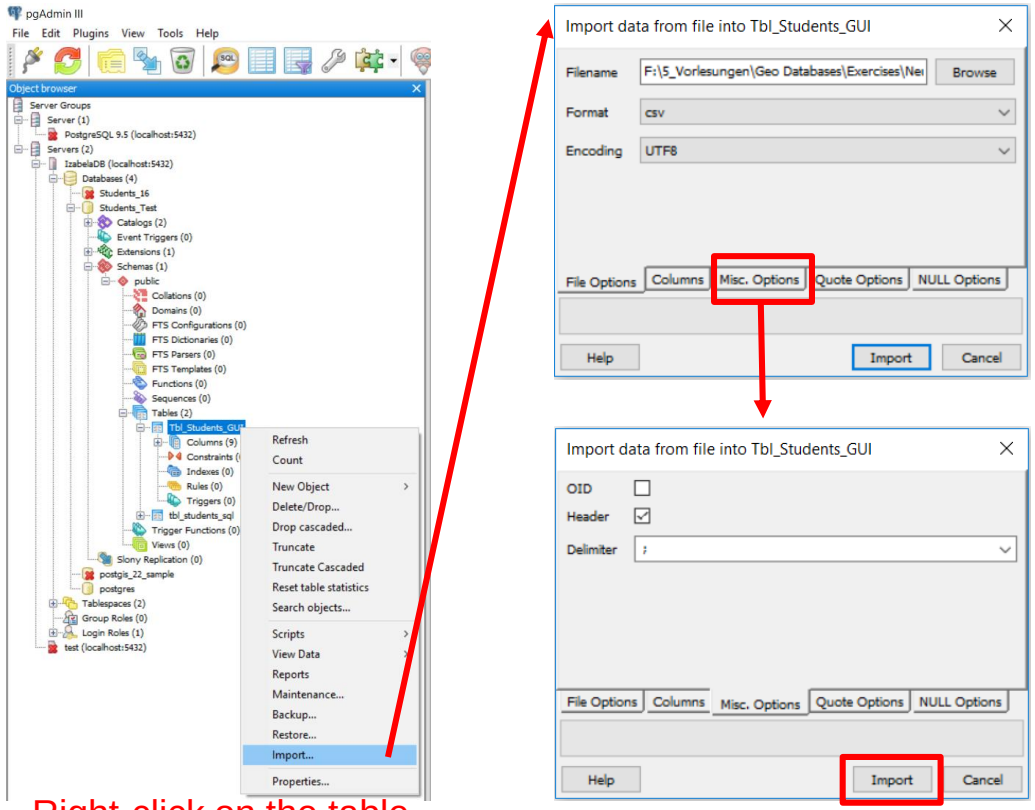


New table using SQL command



Copy the .csv-file into the database

Copy the file using pgAdmin GUI



Right-click on the table

Copy the file using SQL command

```
COPY tbl_students
FROM 'F:\ ... YOUR PATH ... \Students_16.csv'
DELIMITER ';'
CSV HEADER;
```

Insert your Path here

Important: Change your password

Change your password using the command:

ALTER USER **studentName** WITH PASSWORD '**password**';

Do not use the password for your tubIT account!!

Use a NEW password!!