DEALING WITH DATA

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CLASS 5: SQLITESTUDIO ACTIONS

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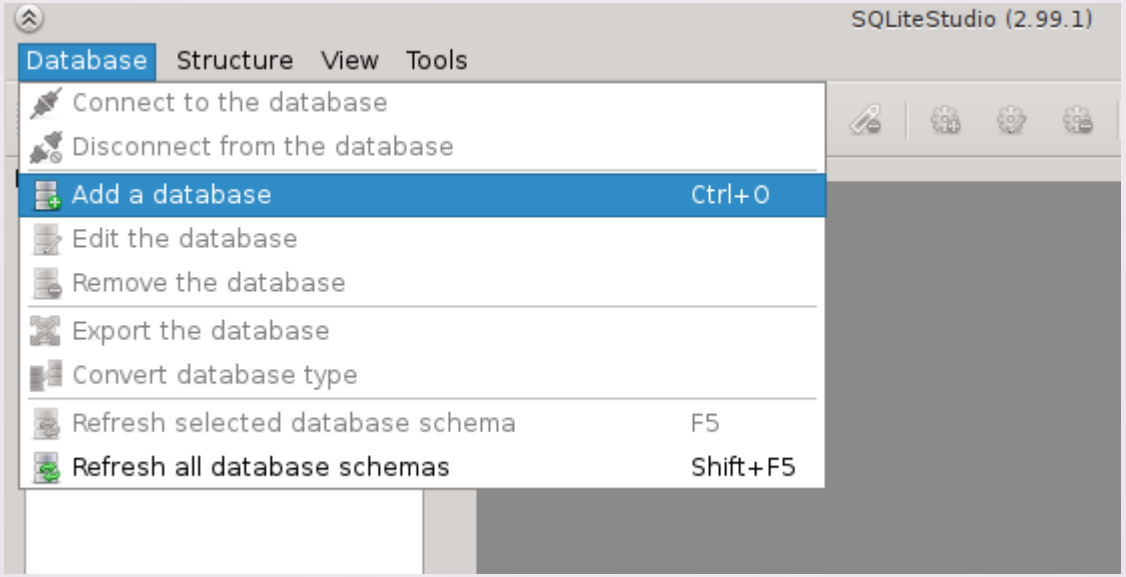
CONTENTS*

1. Creating a database
2. Creating a table
3. Importing data
4. Executing SQL queries

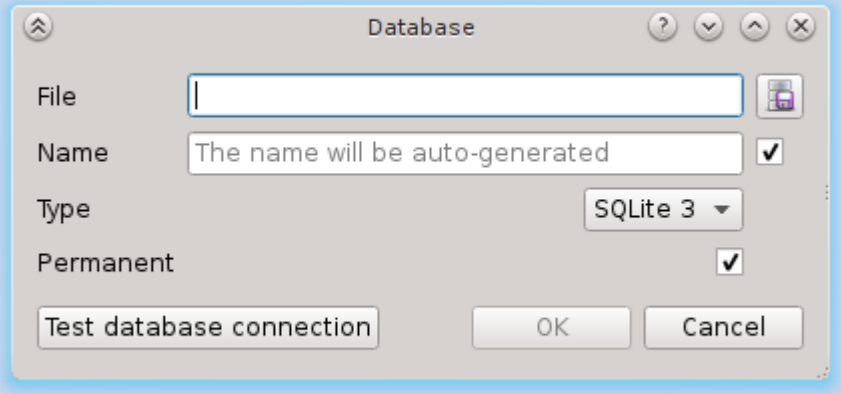
* Adapted from the official SQLiteStudio User Manual at https://github.com/pawelsalawa/sqlitestudio/wiki/User_Manual

CREATING A DATABASE

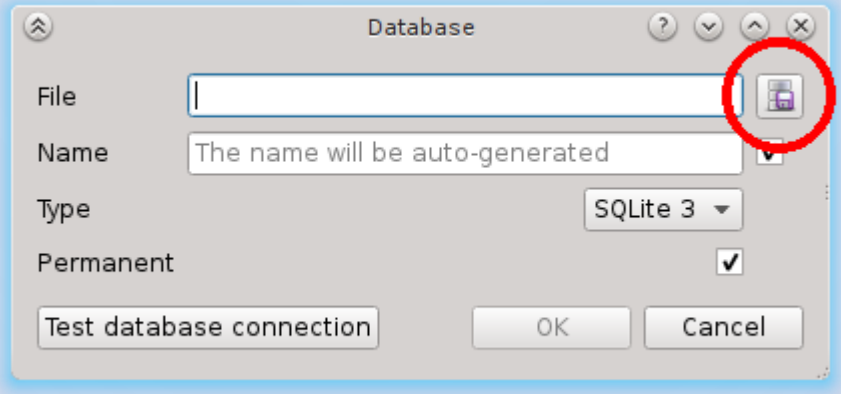
CREATING A DATABASE – STEP 1: INITIATE ACTION



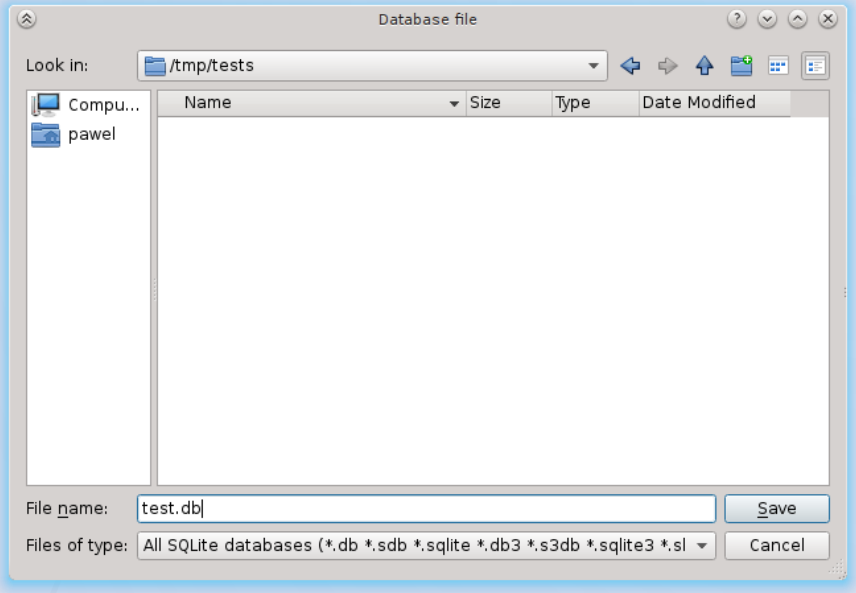
CREATING A DATABASE – STEP 2: DATABASE DIALOG WILL APPEAR



CREATING A DATABASE – STEP 3: CLICK ICON TO BROWSE FILES



CREATING A DATABASE – STEP 4: FILE BROWSE WINDOW APPEARS

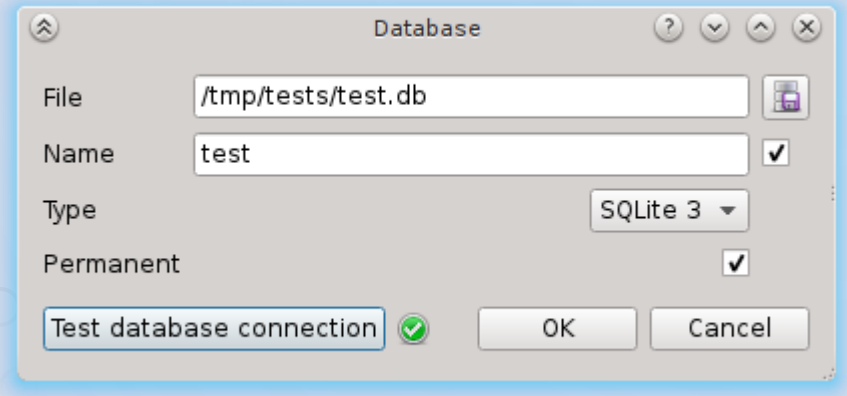


NOTE: the dialog will look different depending on your laptop operating system

1. In this dialog go to directory where you want to create your database and type in the file name for your database (on the image above it's "test.db").
2. Click "Save".
3. Now the database dialog has file name and database name filled in. (You can change the name to whatever you want (in which case you have to disable the checkbox on the right hand side), or just leave it as it is.)

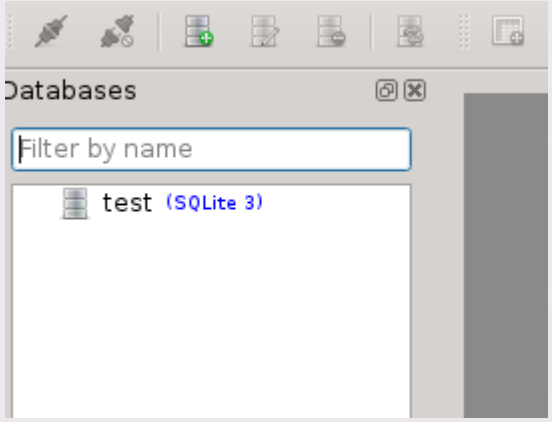
The database name is just symbolic name, an alias used by SQLiteStudio to present database in the list. You can pick any name you want, it just has be unique in context of databases already added to SQLiteStudio.

CREATING A DATABASE – STEP 5: DATABASE DIALOG RE-APPEARS

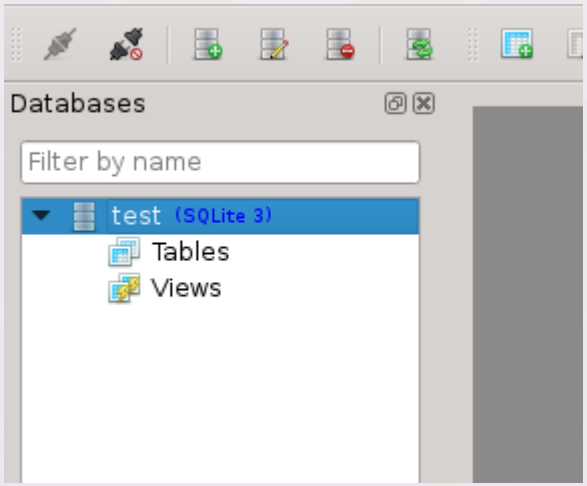


1. You can press "Test connection" to make sure that your database file can be created in specified localization (in regards of directory permissions, free space, etc).
    1. If everything is okay, than you will see green icon next to it
    2. If there was any problem, the red icon will appear.
2. You can now press "Ok" to create the database

CREATING A DATABASE – STEP 6: NEW DATABASE APPEARS IN MAIN VIEW'S LEFT NAVIGATION WINDOW

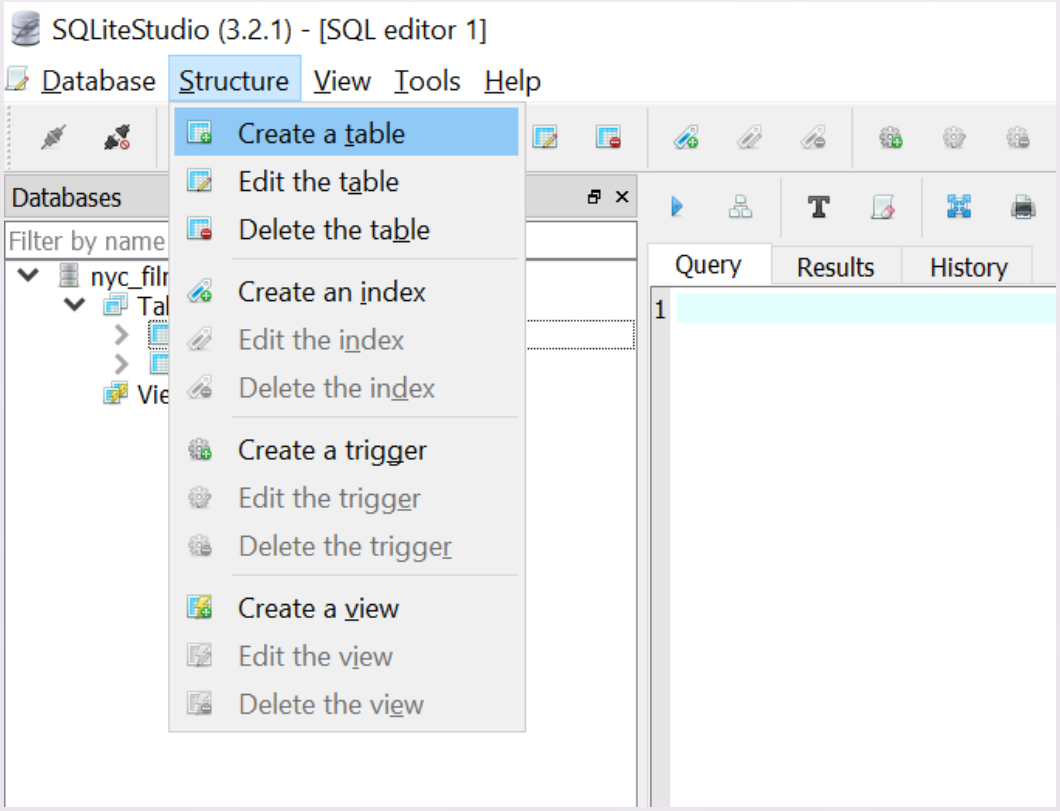


CREATING A DATABASE – STEP 7: DOUBLE CLICK NEW DATABASE IN LEFT NAV TO VIEW DETAILS (TABLES, VIEWS)

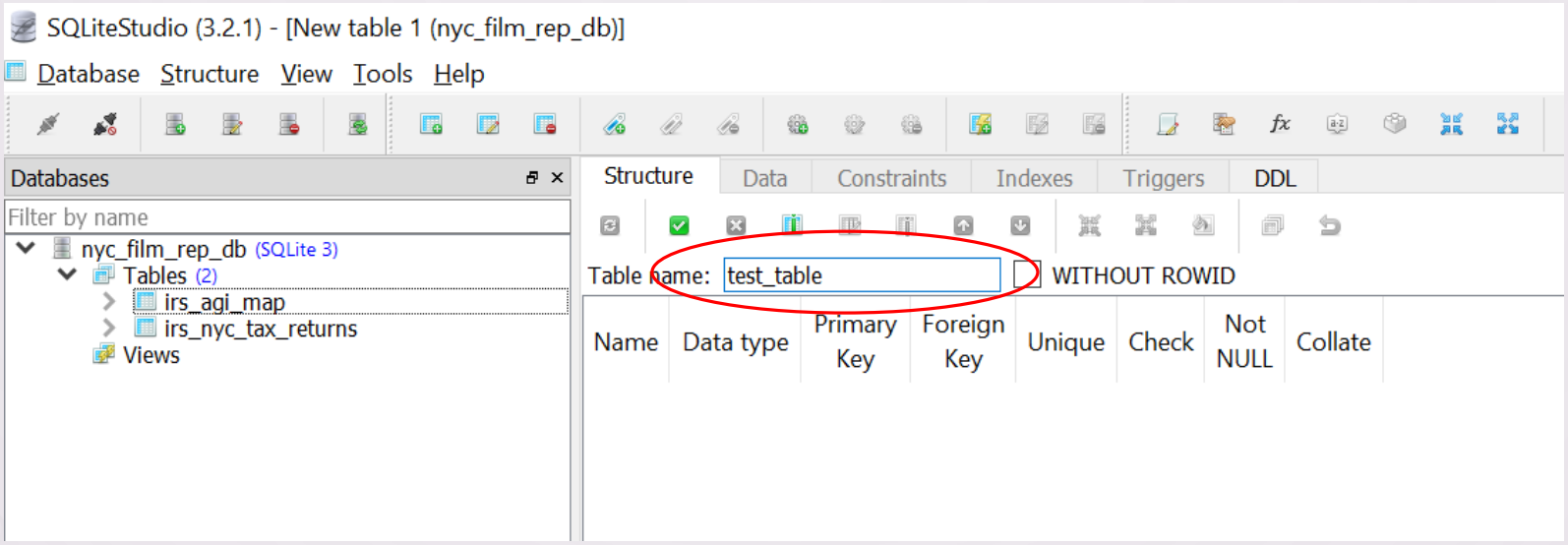


CREATING A TABLE

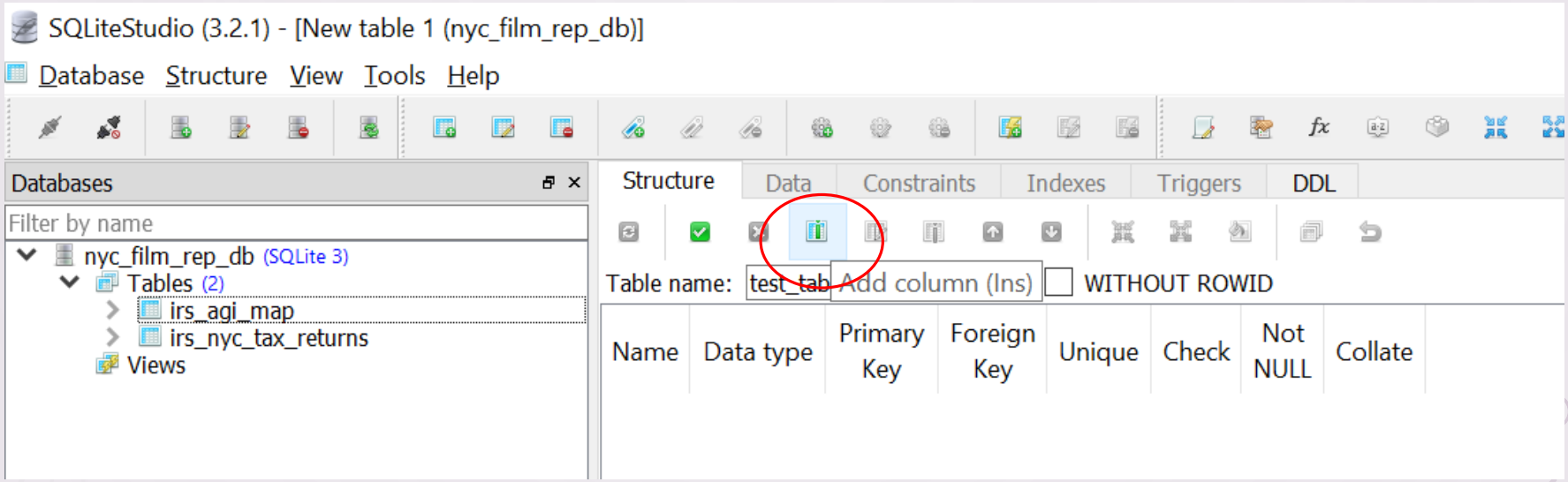
CREATING A TABLE – STEP 1: SELECT DATABASE AND INITIATE ACTION



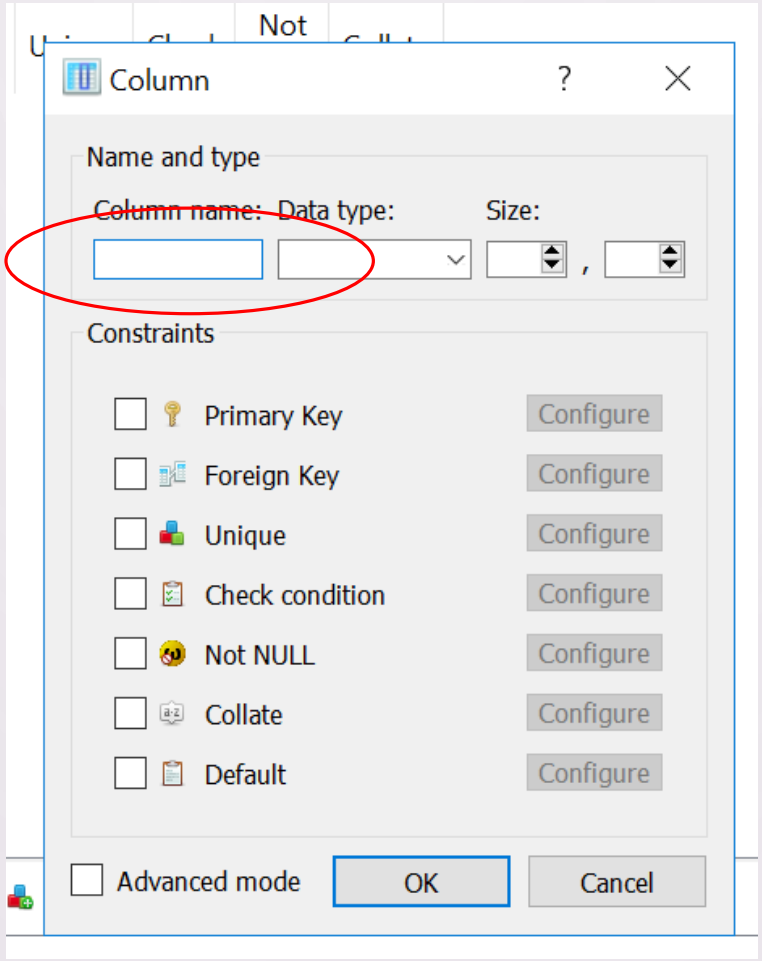
CREATING A TABLE – STEP 2: NAME TABLE



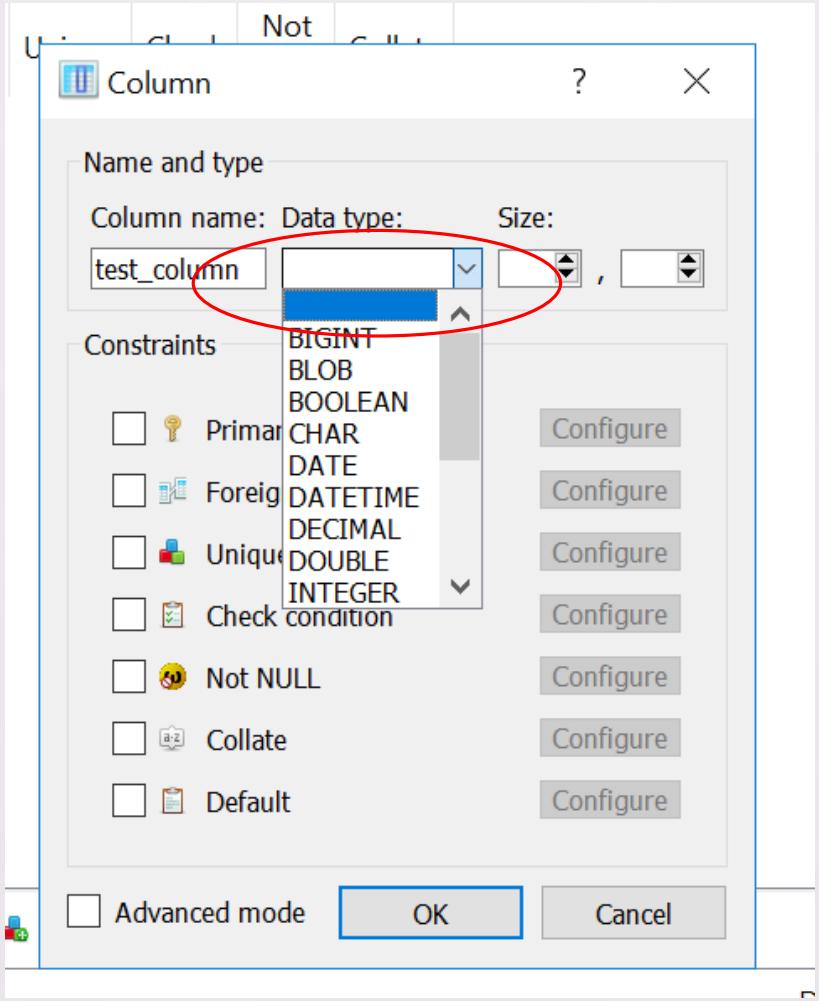
CREATING A TABLE – STEP 3: HIT ADD COLUMN ICON



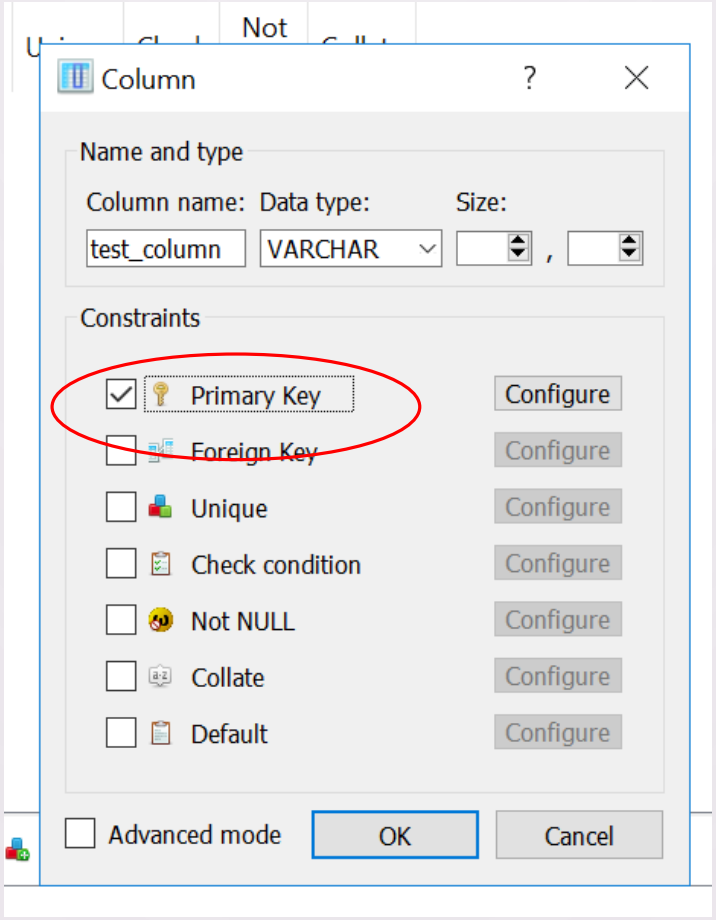
CREATING A TABLE – STEP 4: CREATE COLUMN NAME



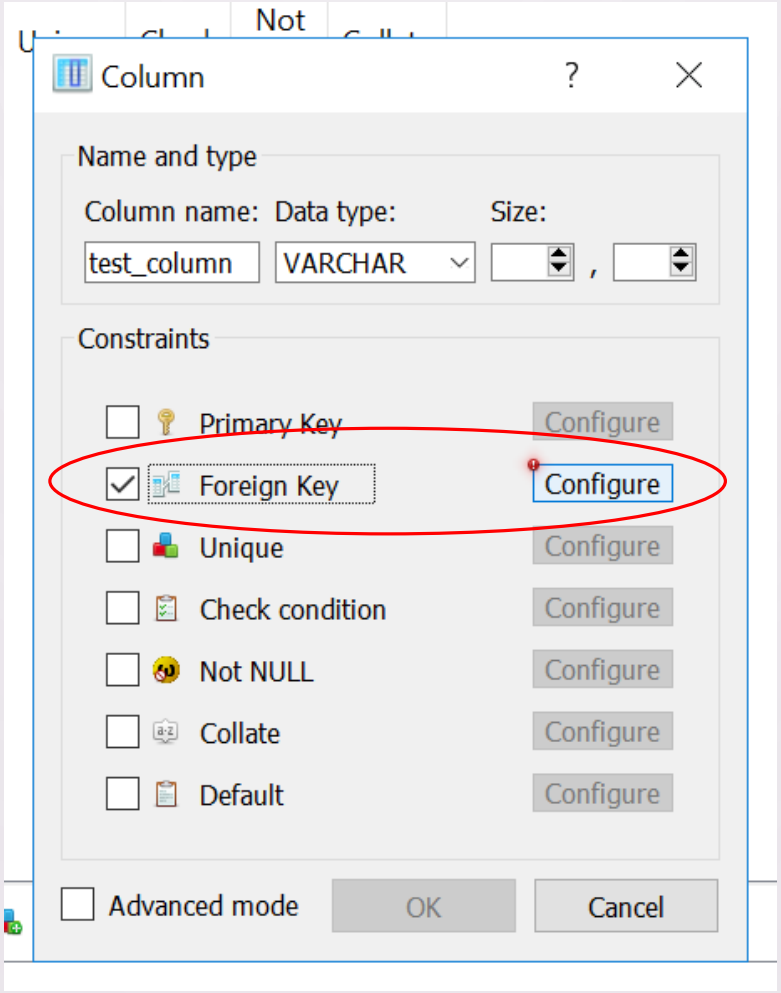
CREATING A TABLE – STEP 5: CHOOSE COLUMN DATA TYPE



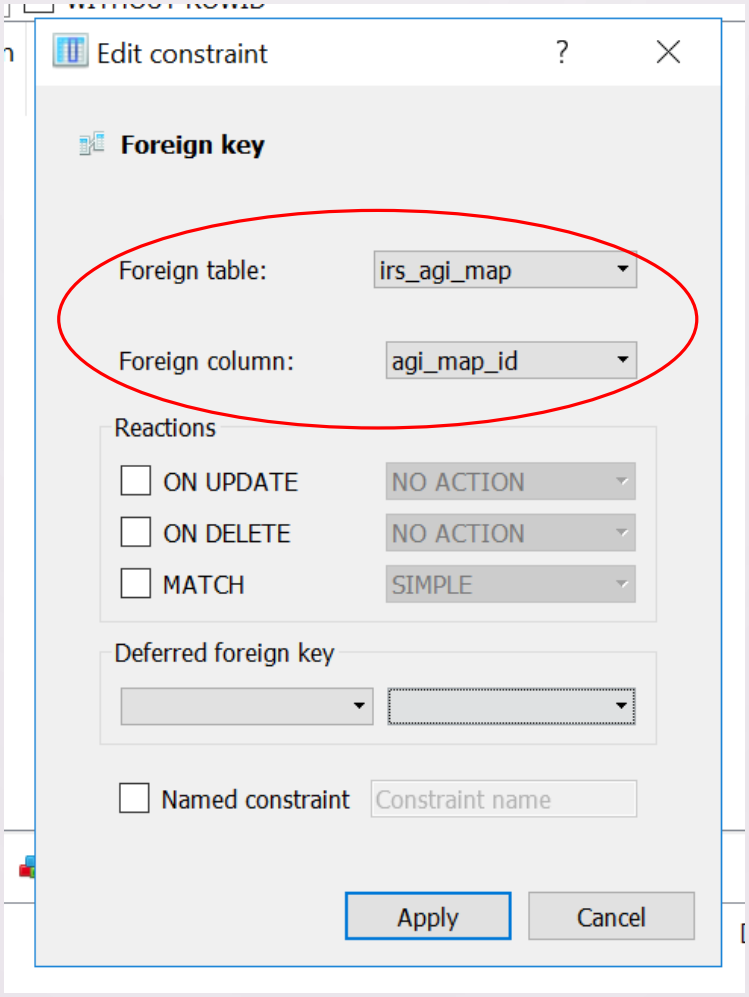
CREATING A TABLE – STEP 5: OPTIONAL STEP #1: MAKE COLUMN PRIMARY KEY



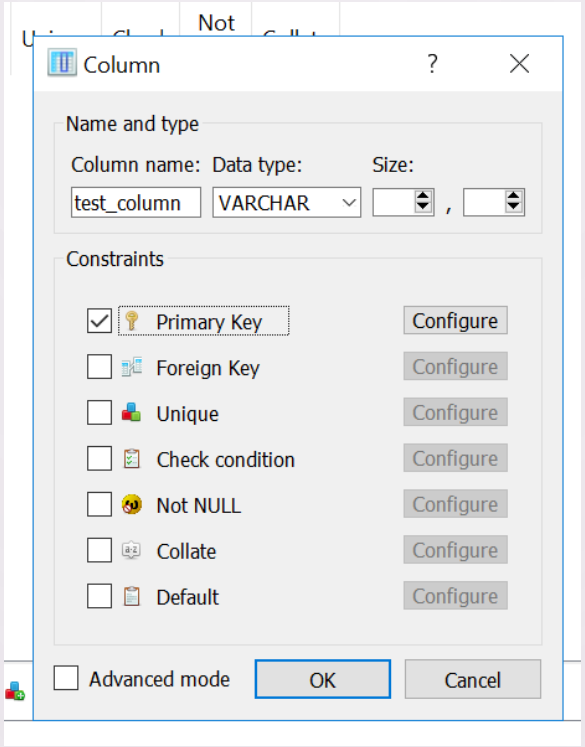
CREATING A TABLE – STEP 5: OPTIONAL STEP #2-1: MAKE COLUMN FOREIGN KEY AND CLICK “CONFIGURE”



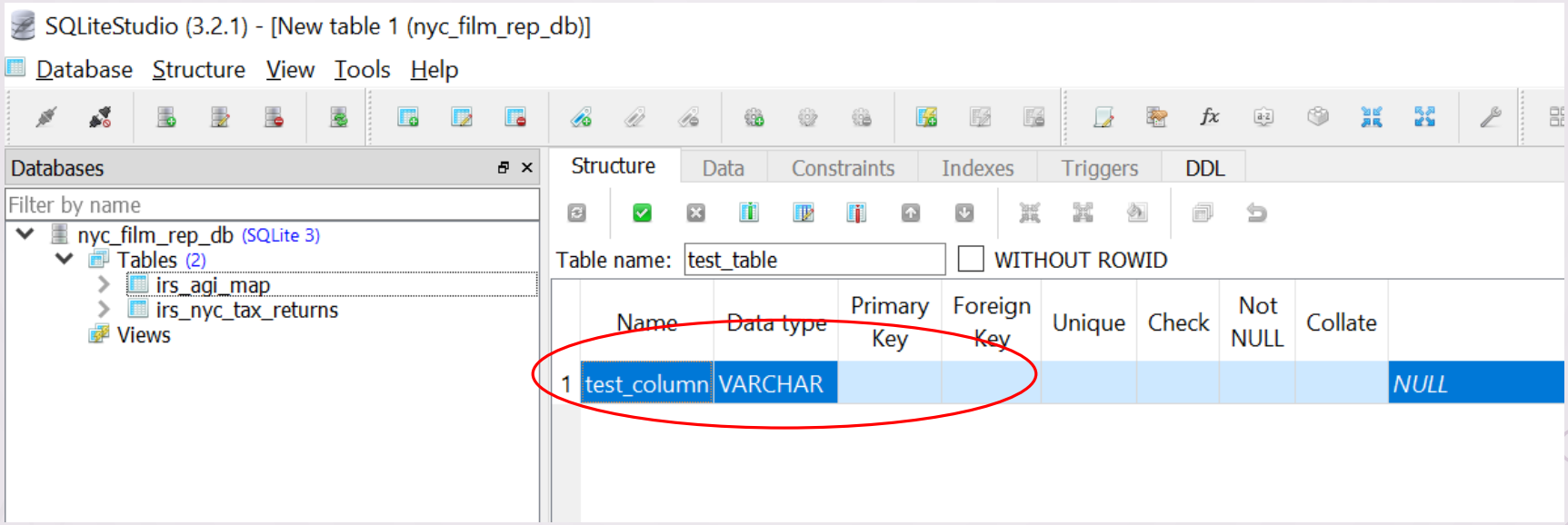
CREATING A TABLE – STEP 5: OPTIONAL STEP #2-2: CONFIGURE FOREIGN TABLE AND COLUMN, CLICK "APPLY"



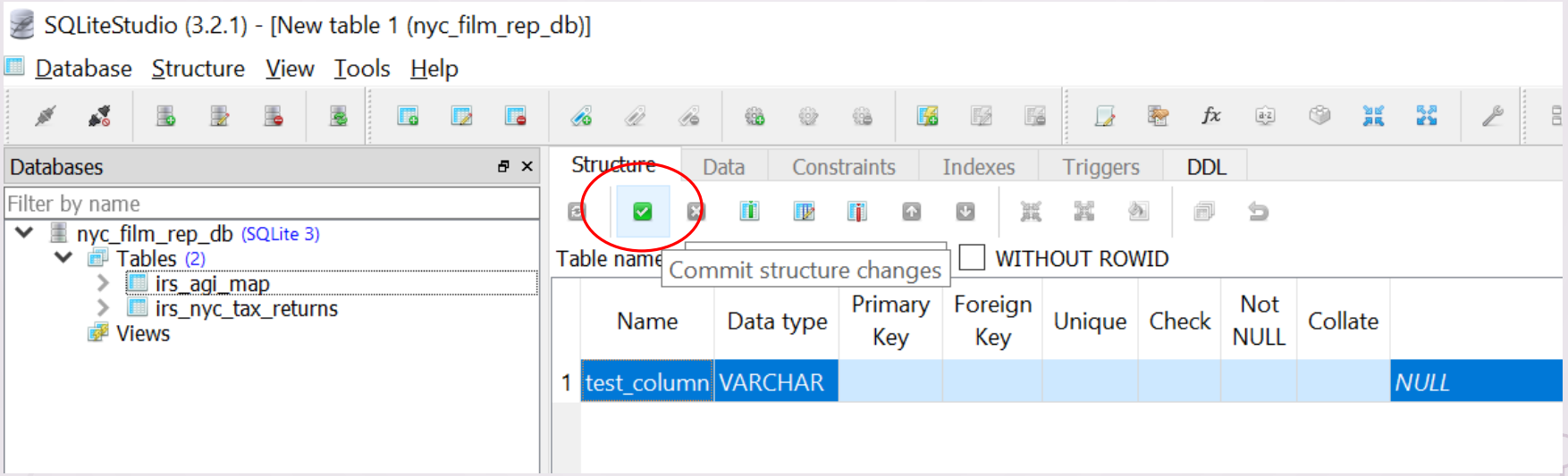
CREATING A TABLE – STEP 6: CLICK OK TO CREATE COLUMN



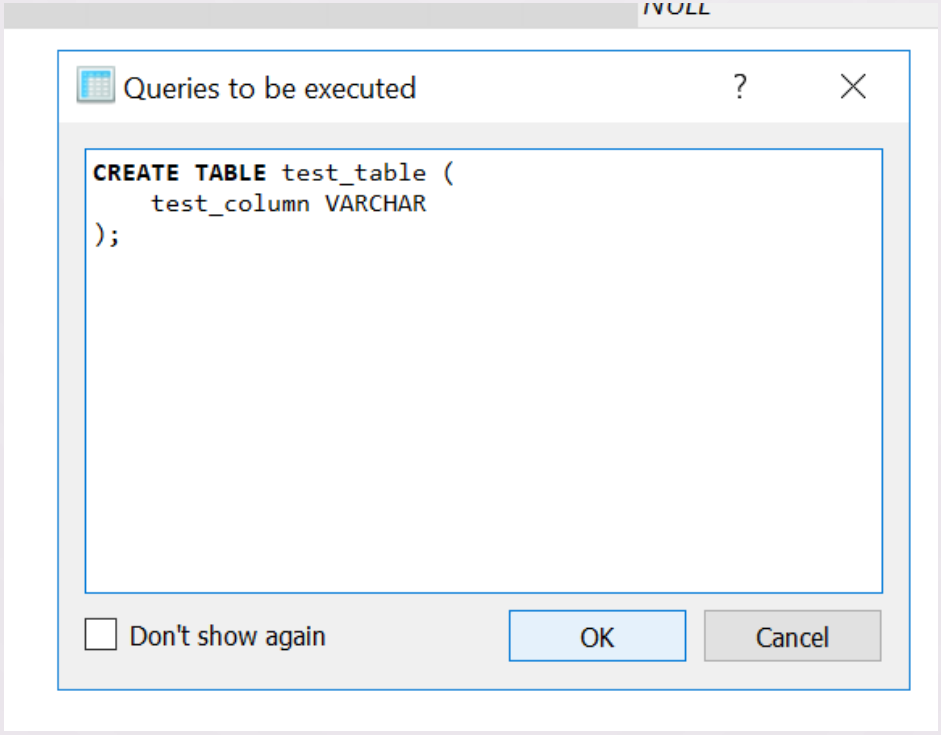
CREATING A TABLE – STEP 7: COLUMN APPEARS IN TABLE SETUP



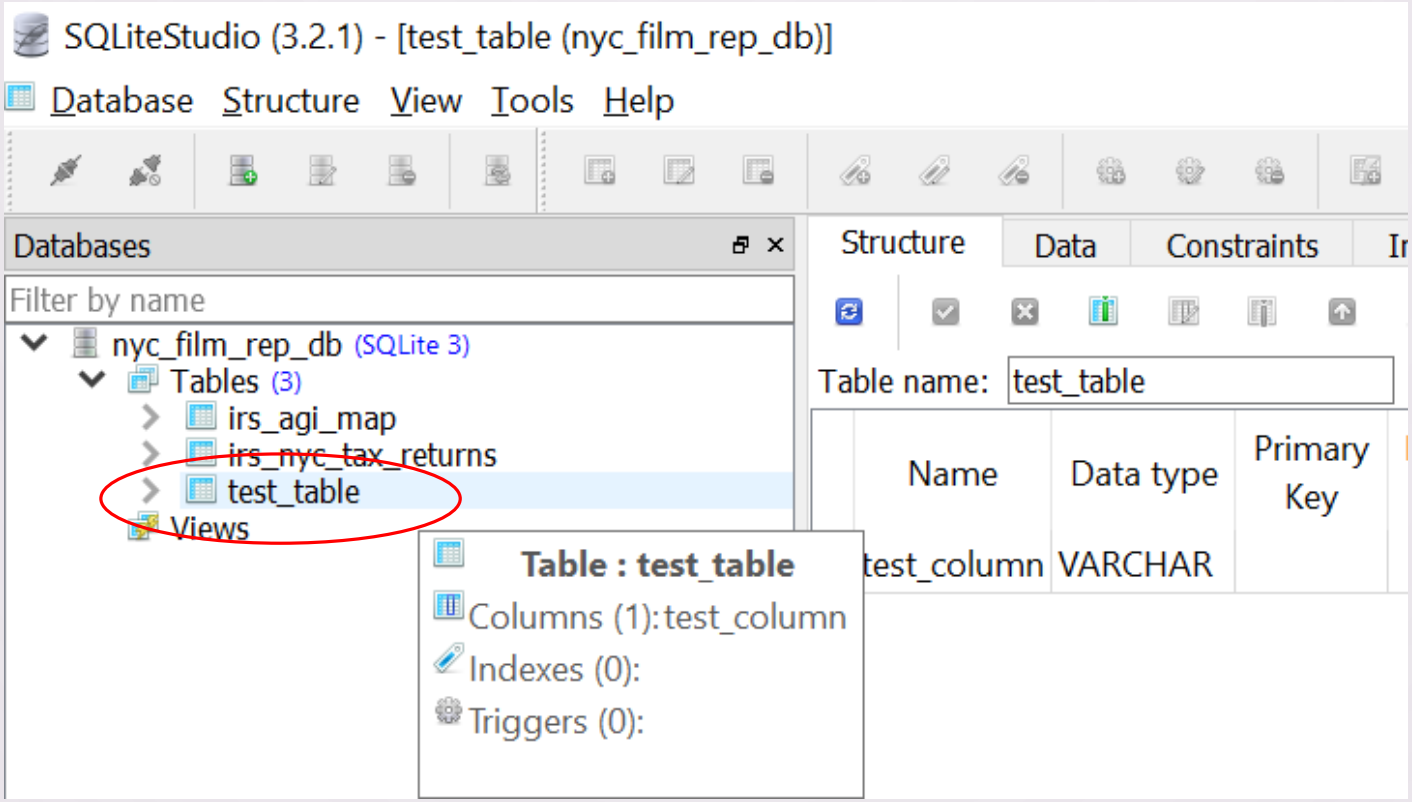
CREATING A TABLE – STEP 8: EXECUTE TABLE CREATION USING ICON



CREATING A TABLE – STEP 9: EXECUTE TABLE BY CLICKING OK

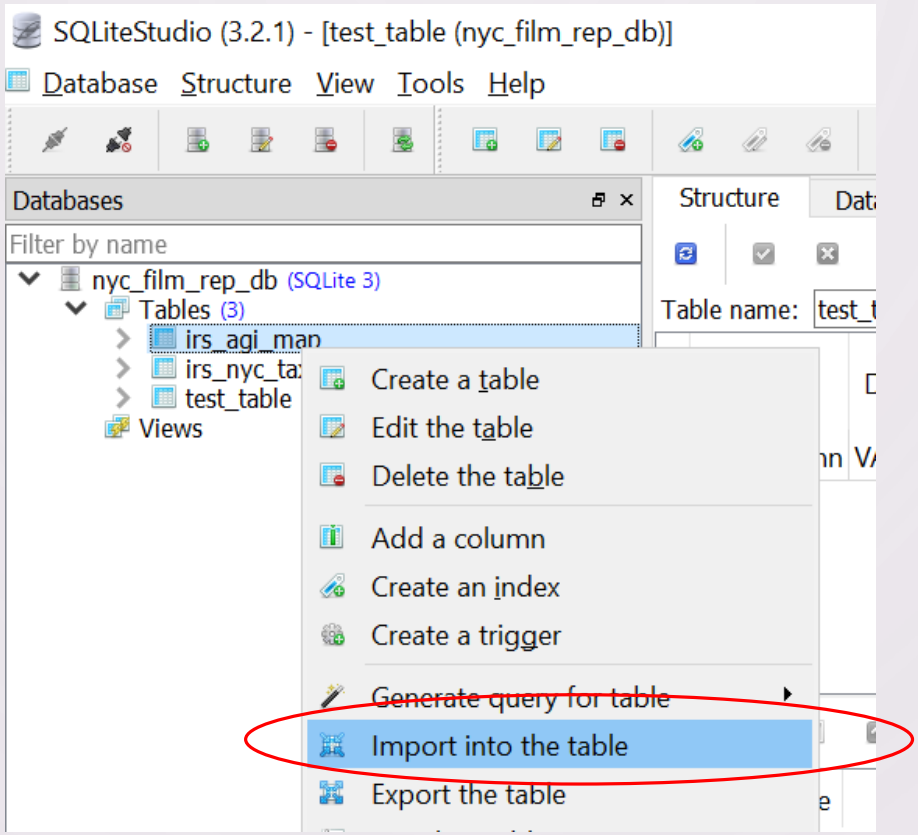


CREATING A TABLE – STEP 9: NEW TABLE APPEARS UNDER DATABASE IN LEFT NAV

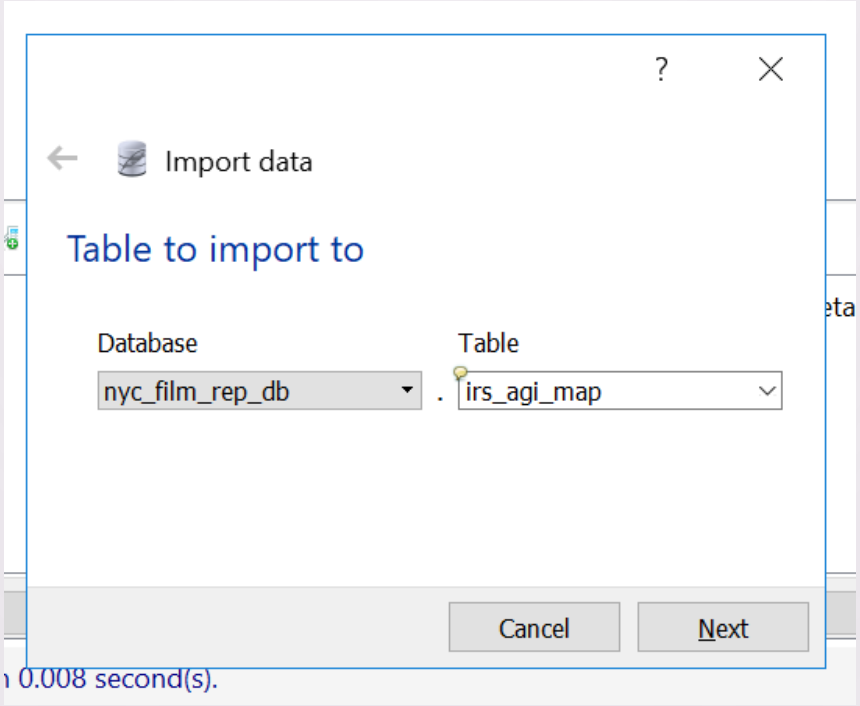


IMPORTING DATA

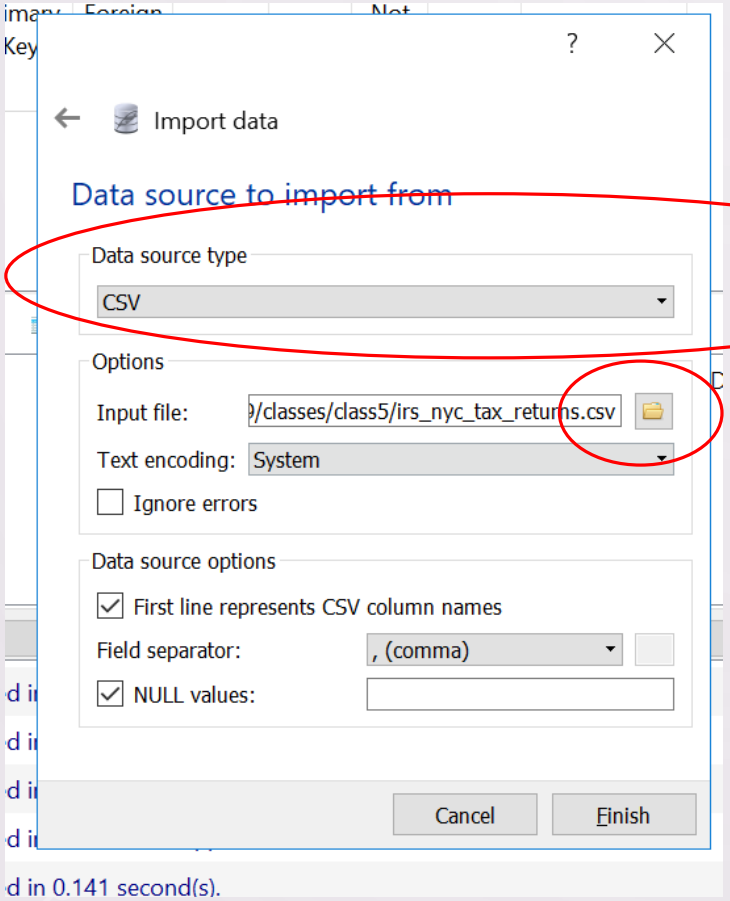
IMPORTING DATA – STEP 1: RIGHT CLICK ON DESTINATION TABLE AND INITIATE ACTION



IMPORTING DATA – STEP 2: CONFIRM DESTINATION DATABASE AND TABLE, AND CLICK “NEXT”



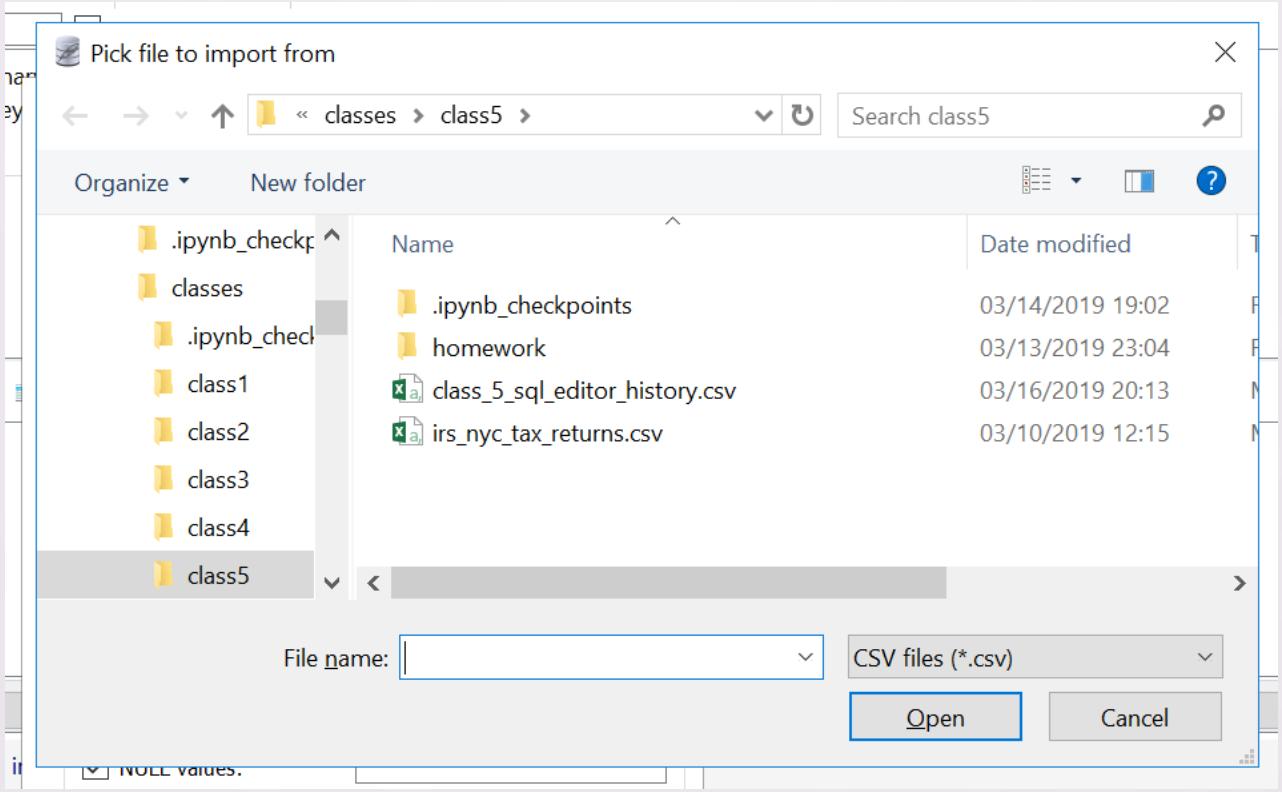
IMPORTING DATA – STEP 3: LOCATE SOURCE CSV* FILE BY CLICKING FOLDER ICON



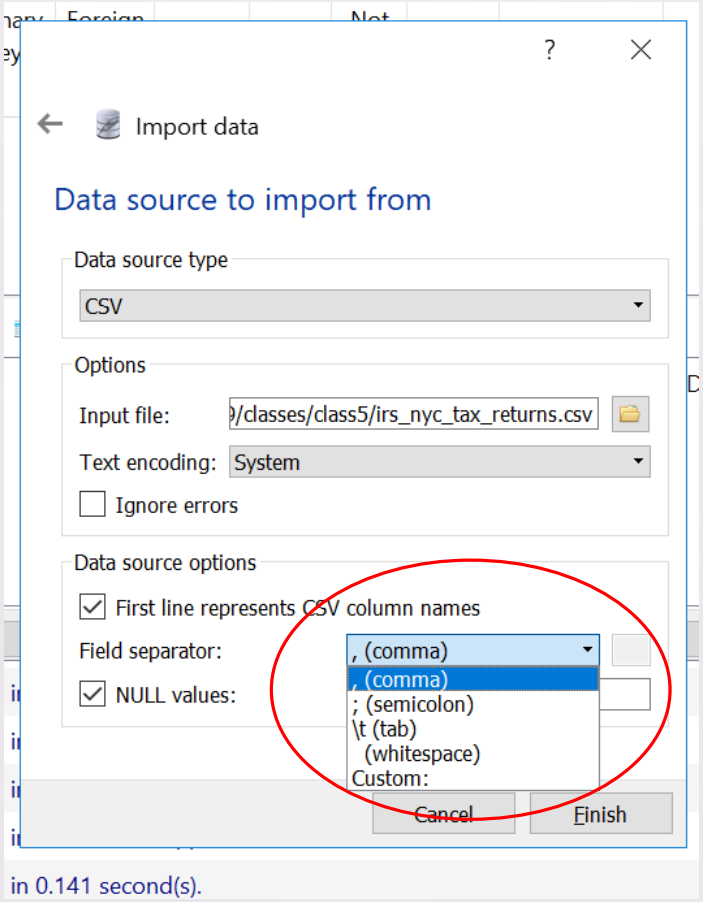
***Data Source Type = CSV** indicates the source file has some type of separator between data fields. It should be used for ALL files that use a comma, tab, or other delimiter

IMPORTING DATA – STEP 4: SELECT SOURCE CSV FILE

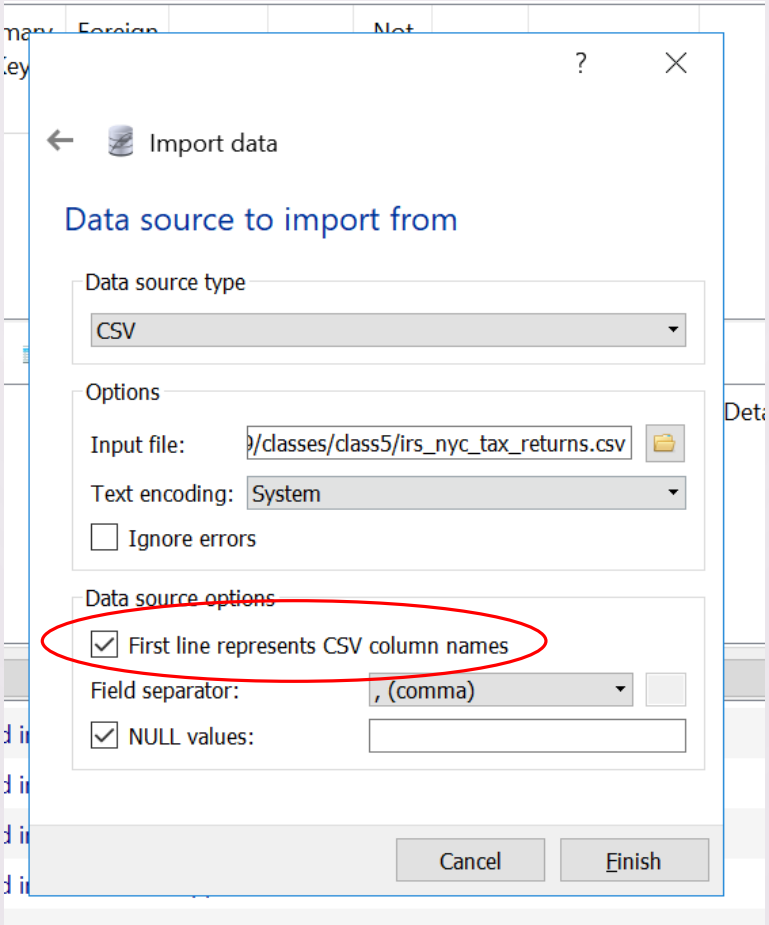
(VIEW MAY DIFFER DEPENDING ON OPERATING SYSTEM)



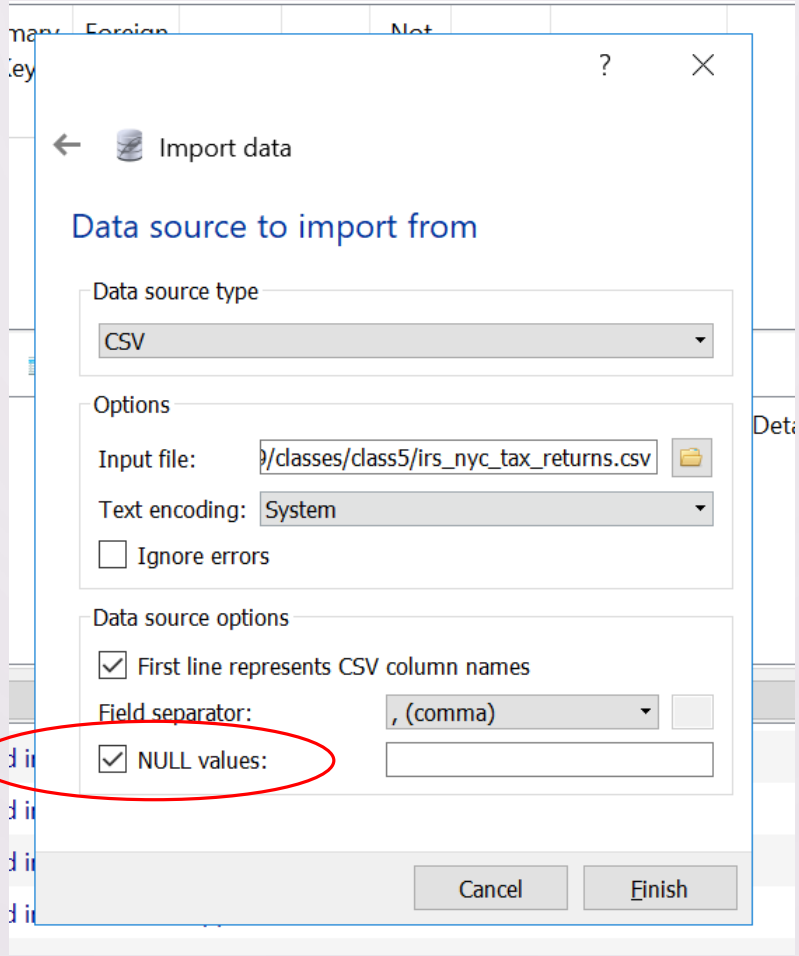
IMPORTING DATA – STEP 5: CONFIRM DATA FIELD SEPARATOR USED IN SOURCE FILE



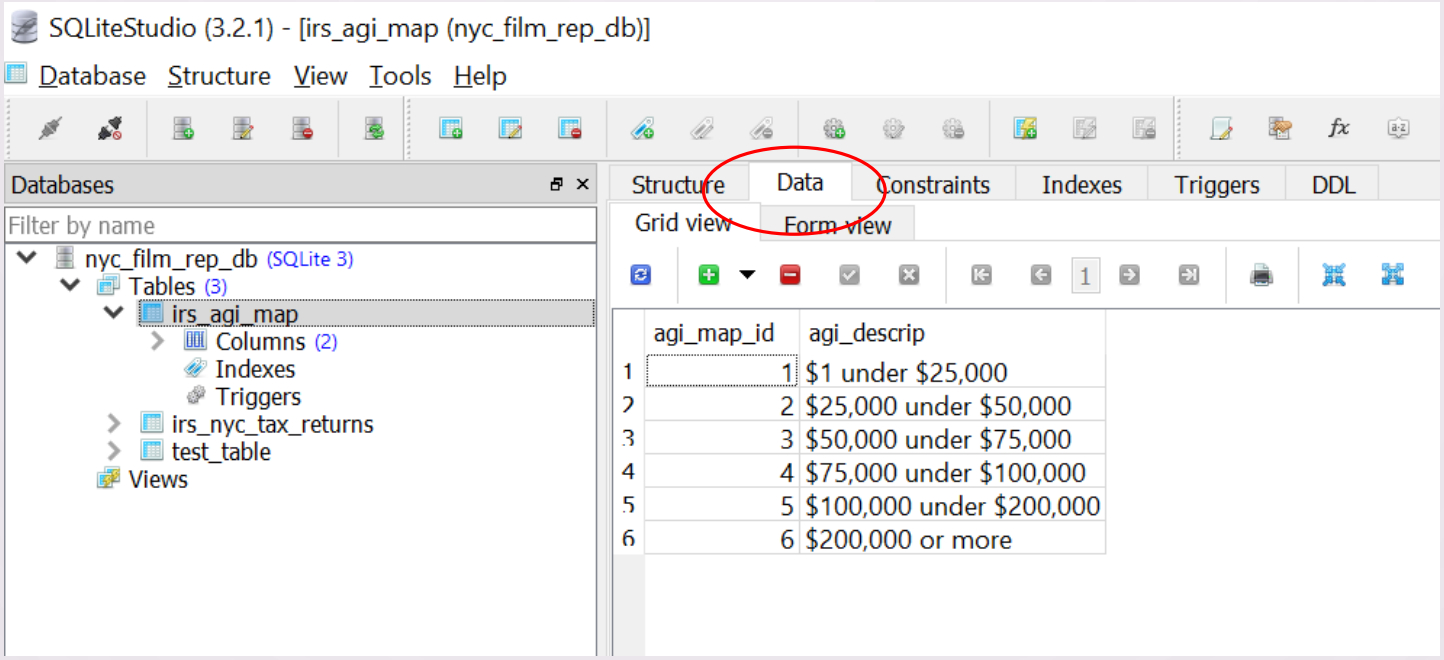
IMPORTING DATA – STEP 6: WHEN SOURCE FILE HAS COLUMN HEADERS IN FIRST LINE, CHECK APPROPRIATE BOX



IMPORTING DATA – STEP 7: MAKE SURE NULL VALUES BOX IS CHECKED AND CLICK FINISH TO IMPORT

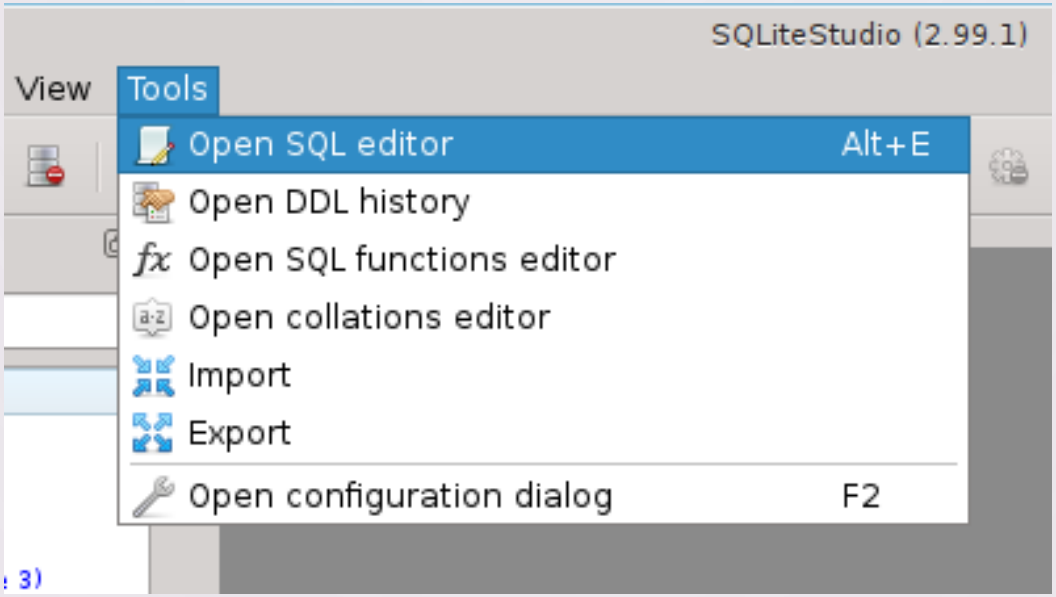


IMPORTING DATA – STEP 8: SELECT "DATA" TAB FOR YOUR DESTINATION TABLE TO SEE NEWLY IMPORTED DATA

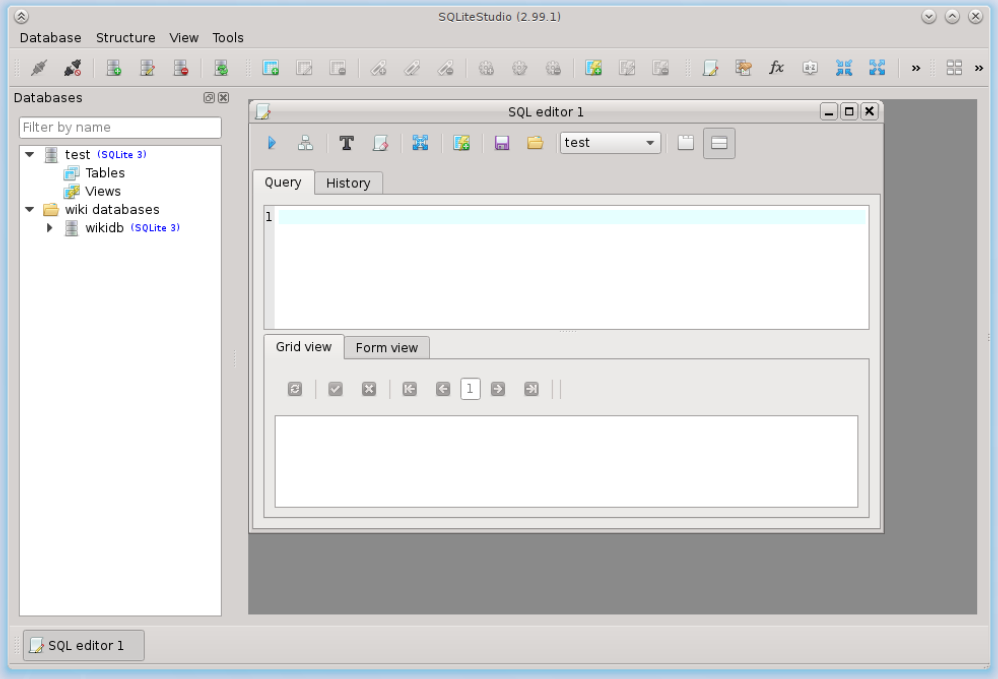


EXECUTING SQL QUERIES

SQL QUERIES – STEP 1: OPEN SQL EDITOR WINDOW



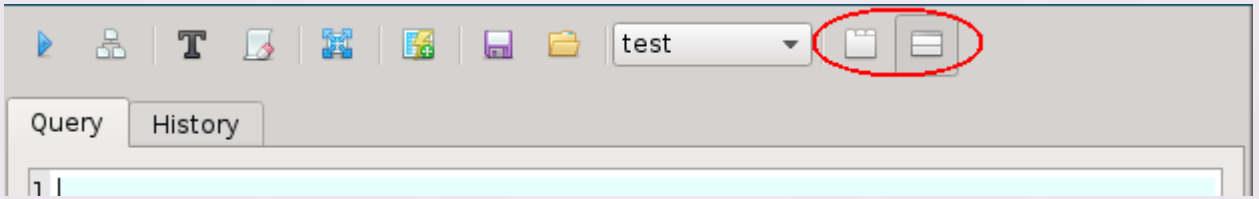
SQL QUERIES – STEP 2: OPEN SQL EDITOR WINDOW



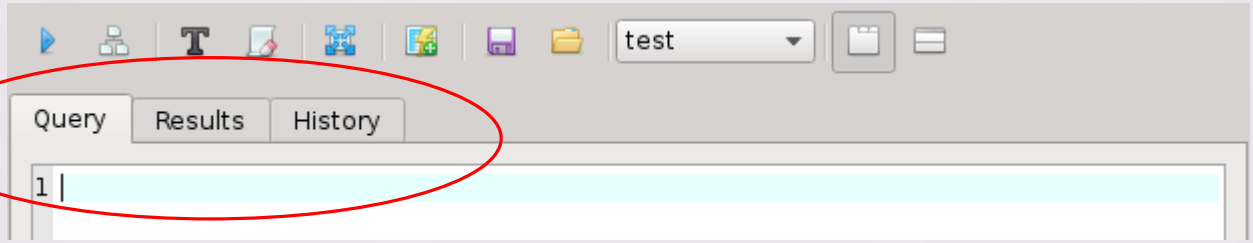
The SQL editor has a upper text edit for entering SQL queries and lower view for displaying results of the query:

SQL QUERIES – STEP 3: CUSTOMIZE RESULTS VIEW

If you prefer to have query edit field on one page and results on another page, you can switch it very quickly from toolbar:



And in the result you get 3 tabs in the editor, instead of 2:



SQL QUERIES – STEP 4: KNOW YOUR TOOLBAR BUTTONS

Buttons on toolbar

- 1st button () executes query the you typed in the query text field below.
- 2nd button () executes `EXPLAIN` statement for the query below.
- 3rd button () uses currently configured SqlFormatterPlugin to format queries typed below.
- 4th button () clears query execution history (available in the last tab of the SQL Editor window).
- 5th button () opens Export_dialog for exporting results from query typed below.
- 6th button () creates view from the `SELECT` query typed below.
- 7th button ( saves contents of the query text field below into the file.
- 8th button () loads contents of selected file into the query edit field below.
- 9th position is a combo box, where you can pick current working database for the SQL Editor window. All queries are executed on database selected in this combobox.
- 10th and 11th buttons () are a shortcut to configure SQL Editor results presentation mode - in separate tab, or below the query field.

SQL QUERIES – STEP 5: CREATE QUERY AND HIT "PLAY" BUTTON TO EXECUTE