



INSTITUTO FEDERAL
DE EDUCAÇÃO, CIÊNCIA E TECNOLOGIA
Bahia

Banco de Dados

Criando o Modelo Físico no Workbench.

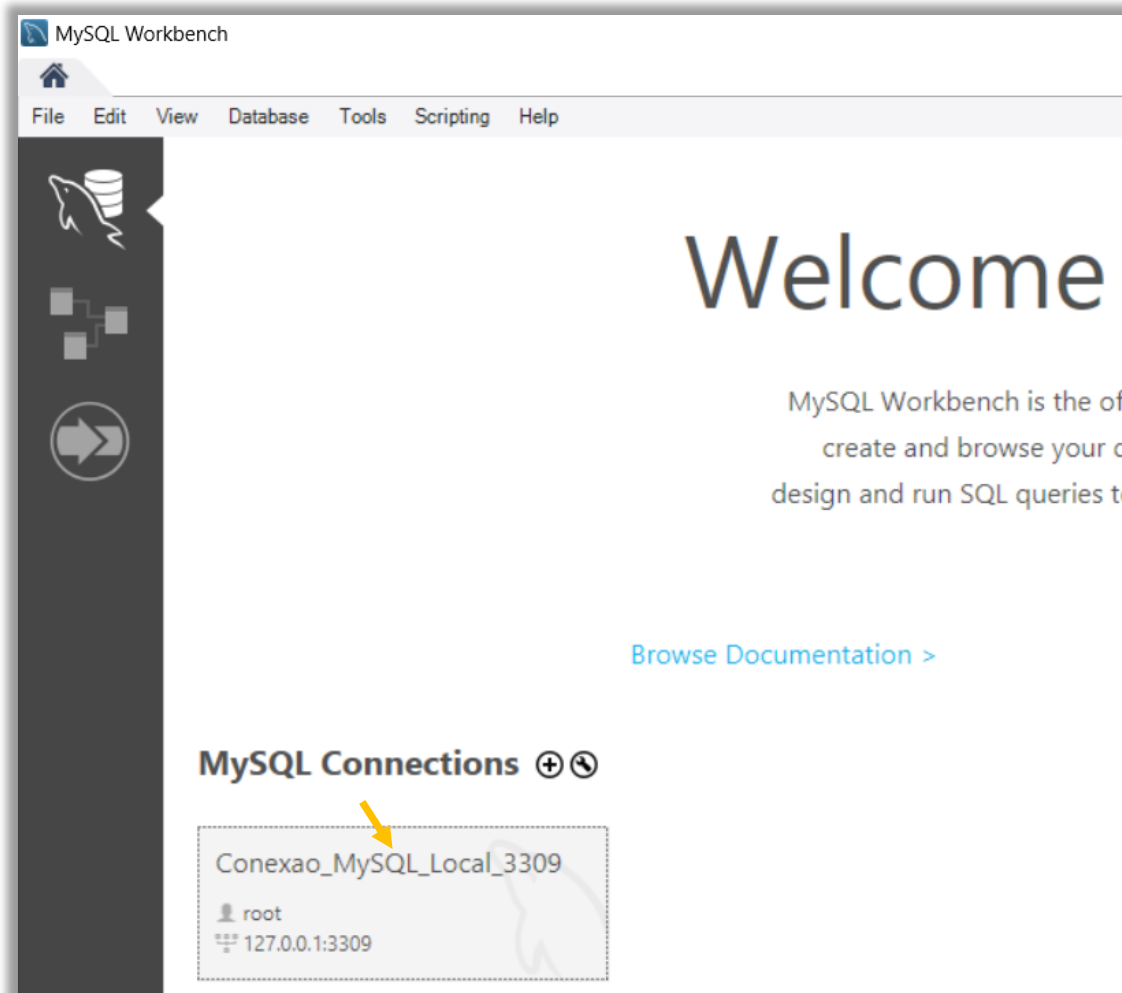


Roteiro

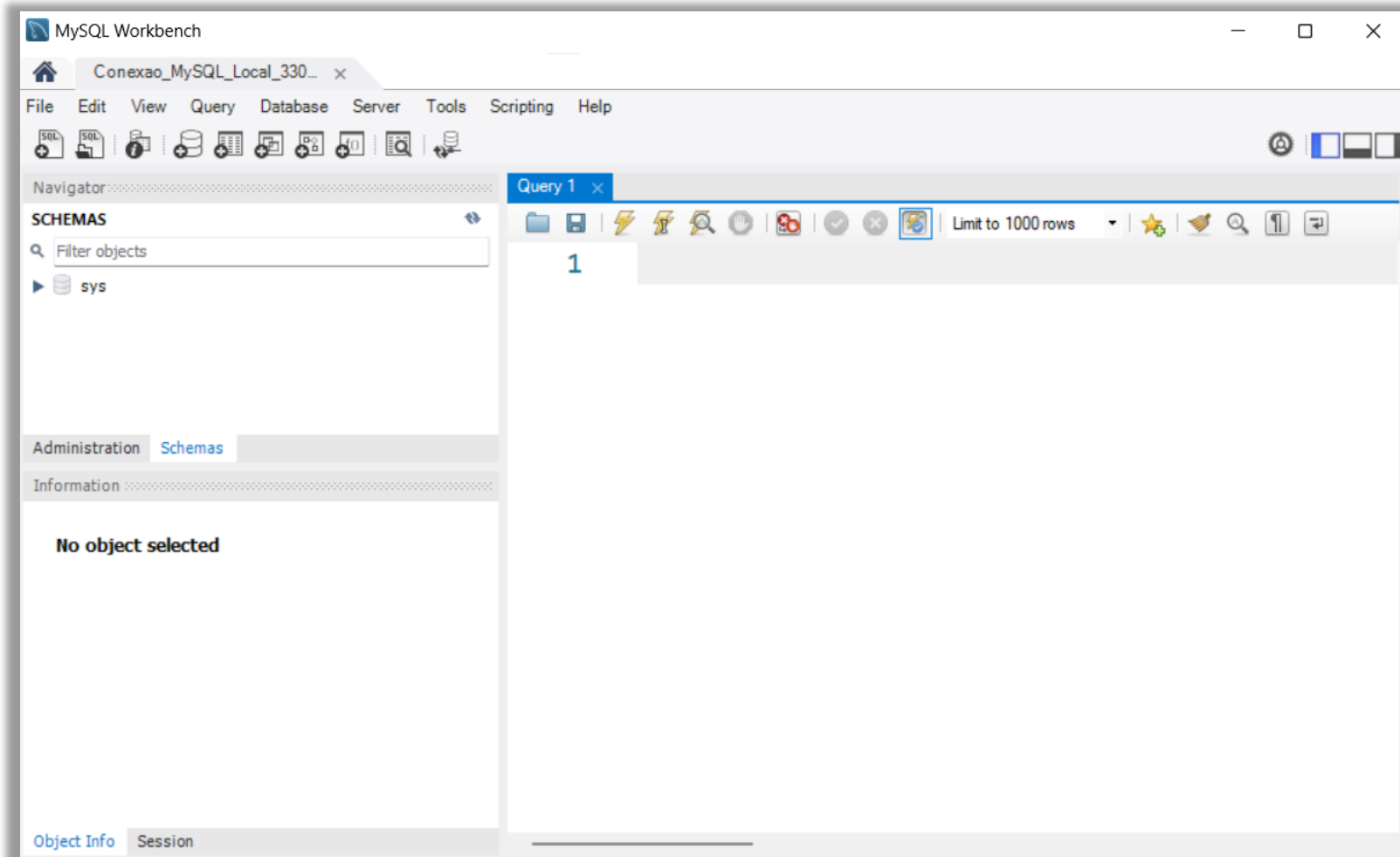
- Criando o Modelo Físico no Workbench:
 - Workbench:
 - Conexão com o MySQL;
 - Criando um Banco de Dados;
 - Tabelas e Relacionamentos;
 - Exibindo Dados da Tabela;
 - Excluindo Tabela;
 - Excluindo Banco de Dados;
 - Atividades.



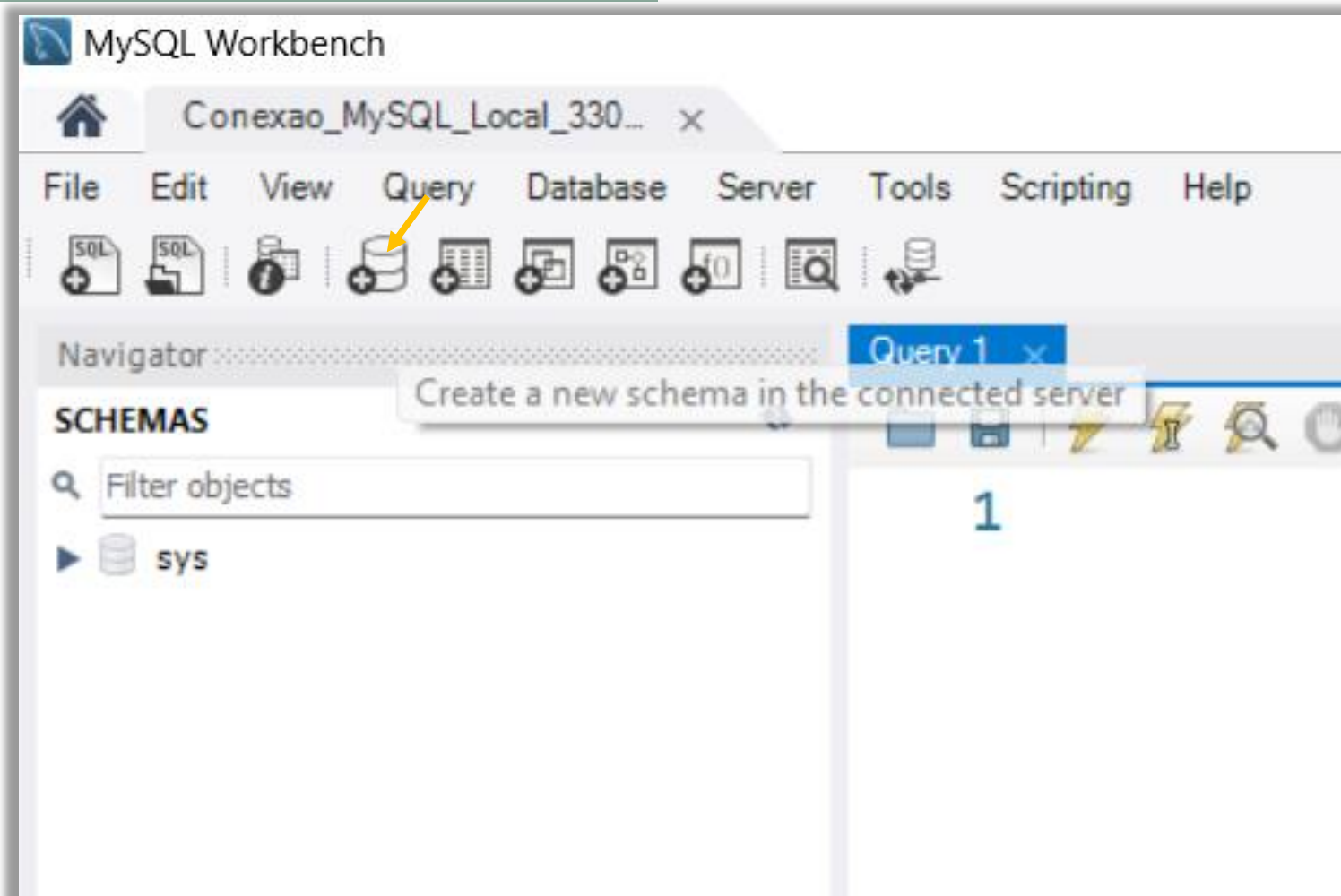
Workbench: Conexão com o MySQL



Workbench: Conexão com o MySQL





Workbench: Criando um Banco de Dados



Workbench: Criando um Banco de Dados

Query 1 BancoABC - Schema

 Name: BancoABC 

Rename References


Charset/Collation: Default Charset ▾ Default Collation ▾

Specify the name of the schema here. You can use any

Refactor model, changing all references found in view, triggers, stored procedures and functions from the old schema name to the

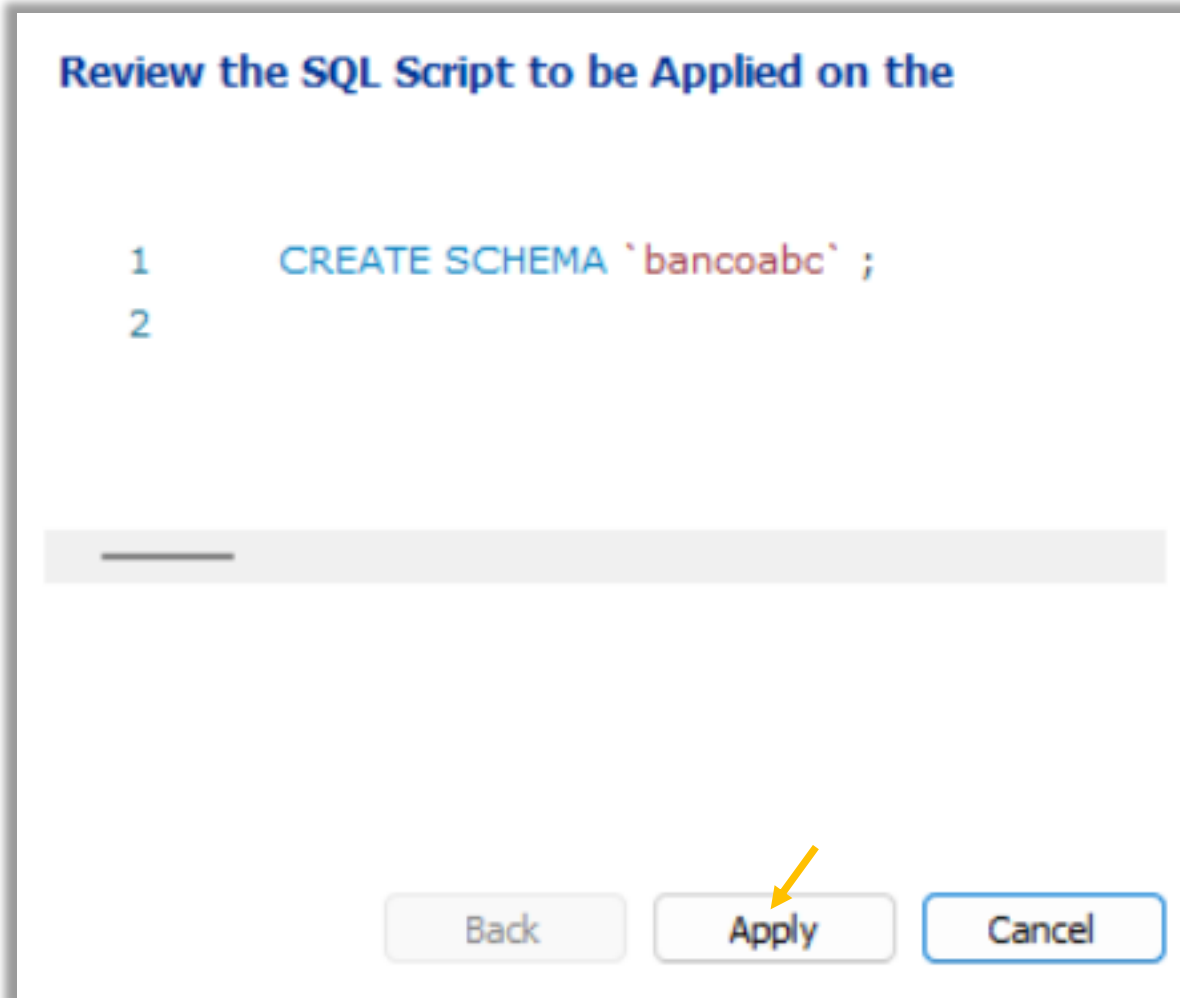
The character set and its collation selected here will be used

Schema

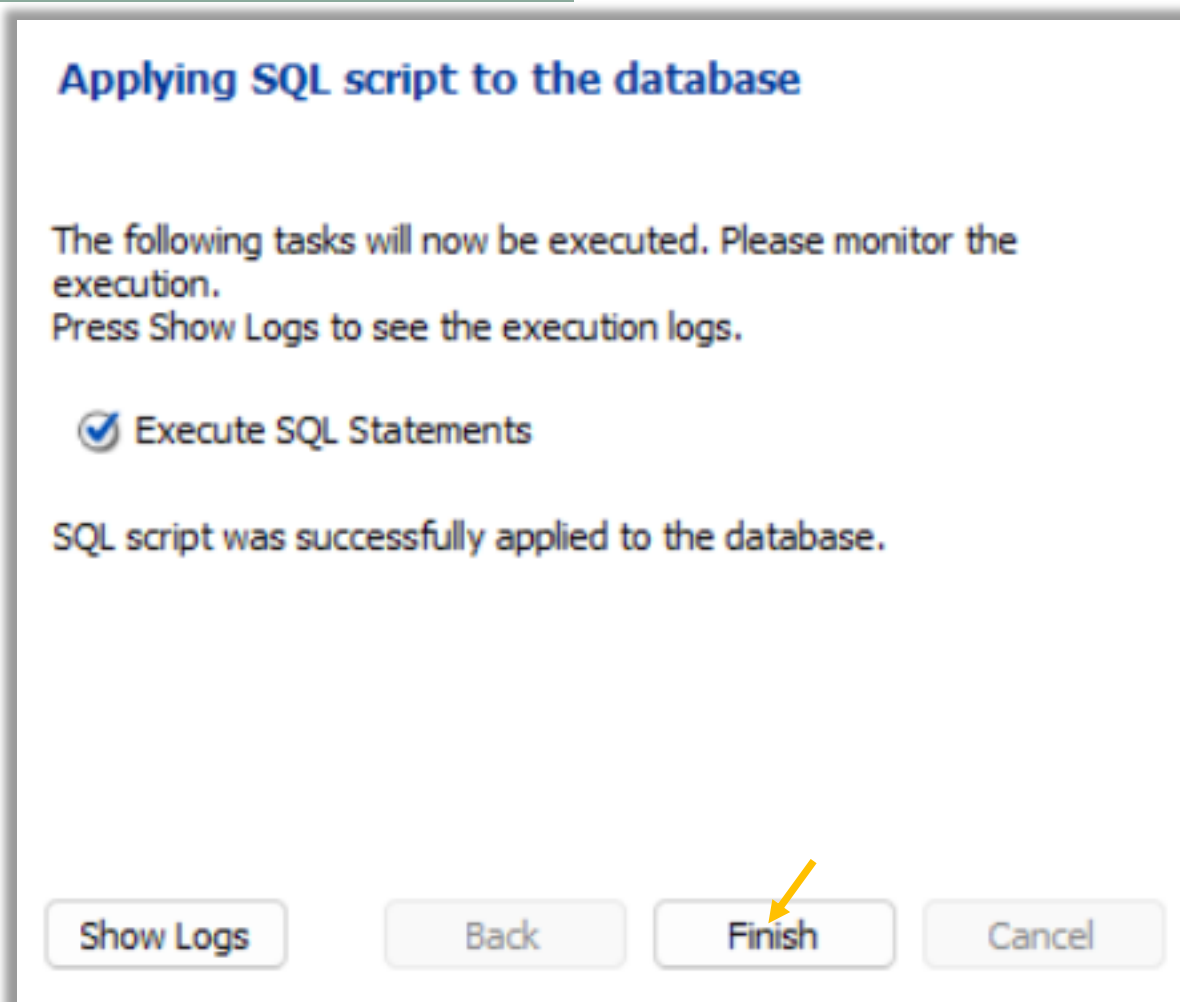
 Apply Revert



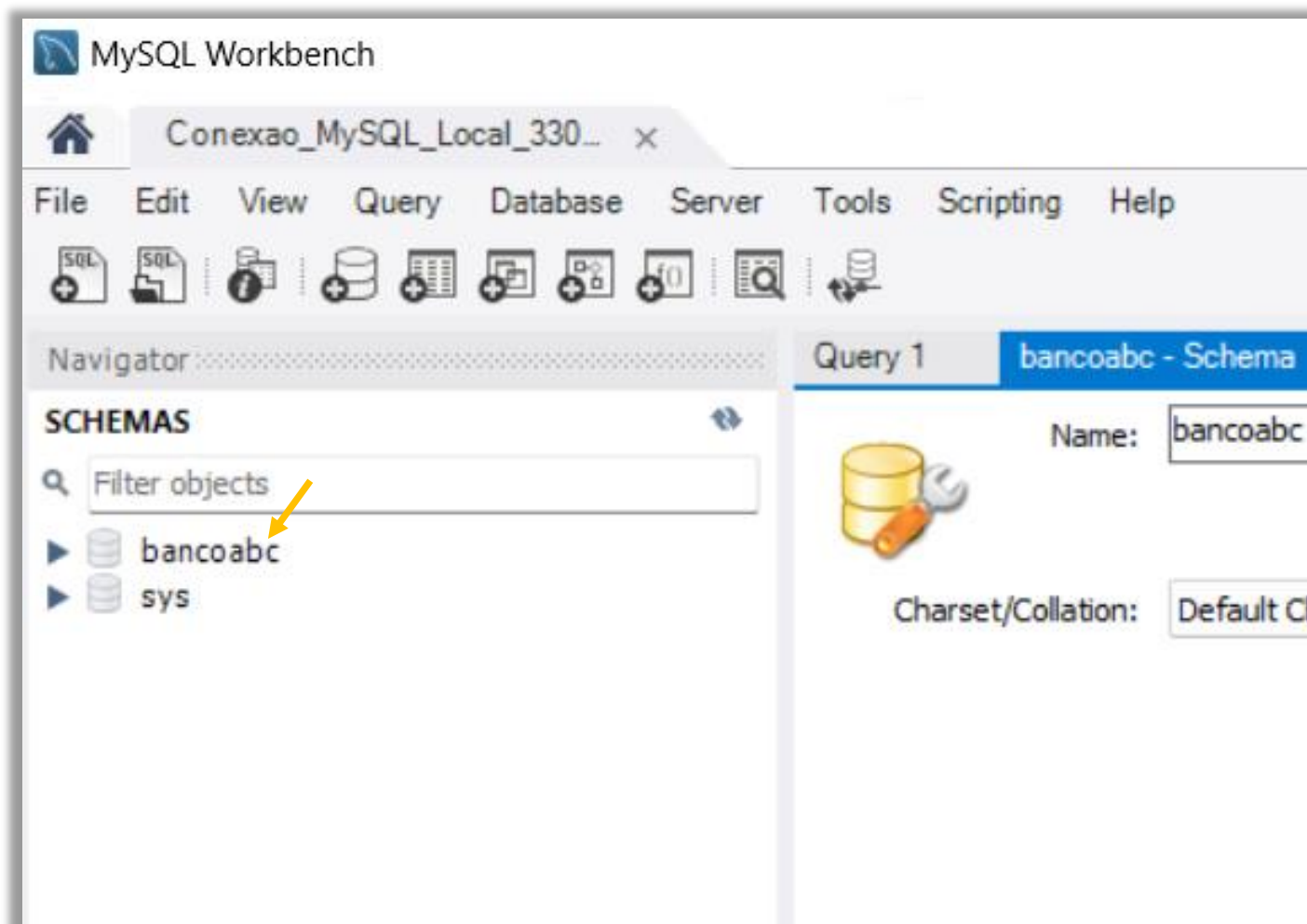
Workbench: Criando um Banco de Dados



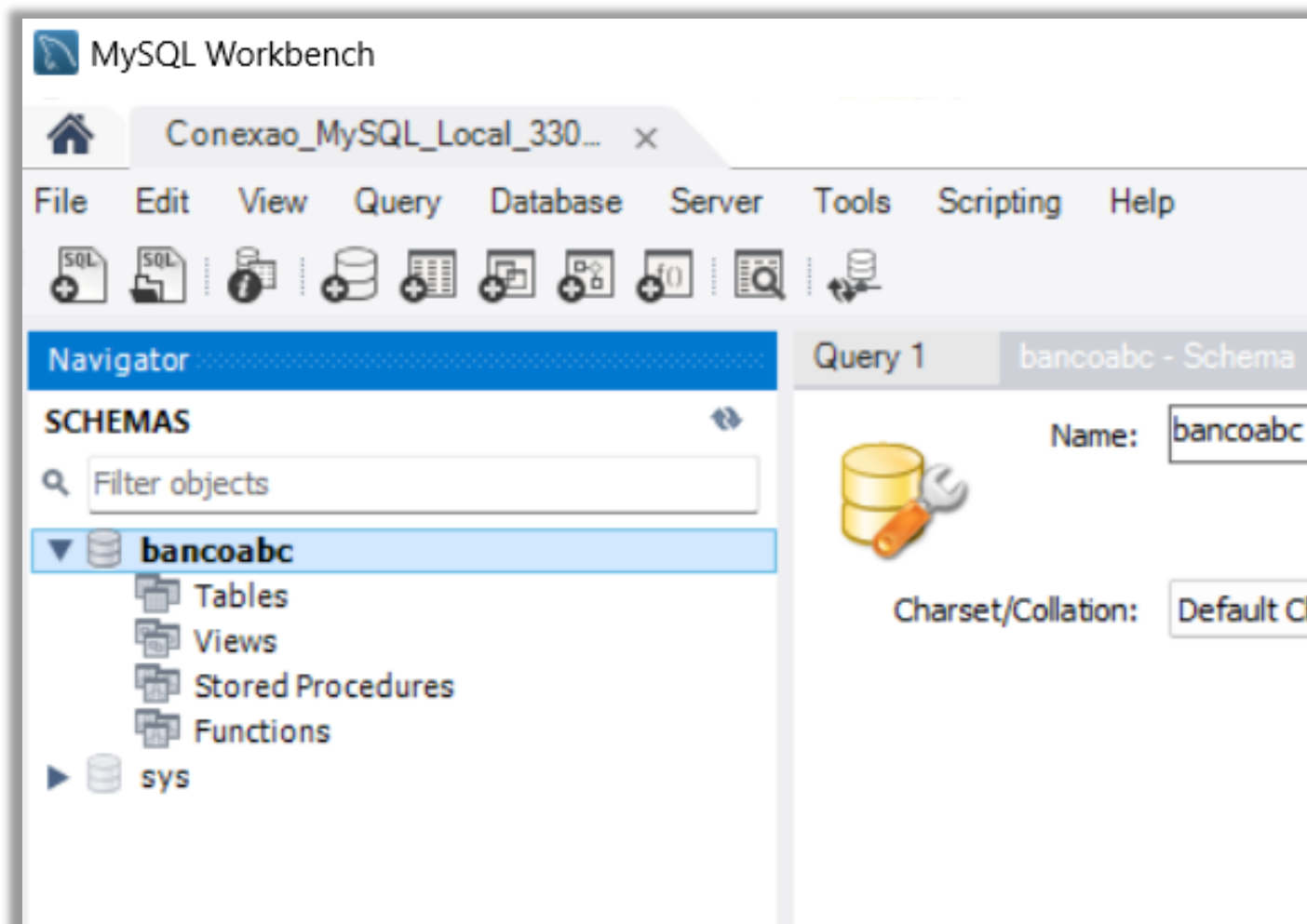
Workbench: Criando um Banco de Dados



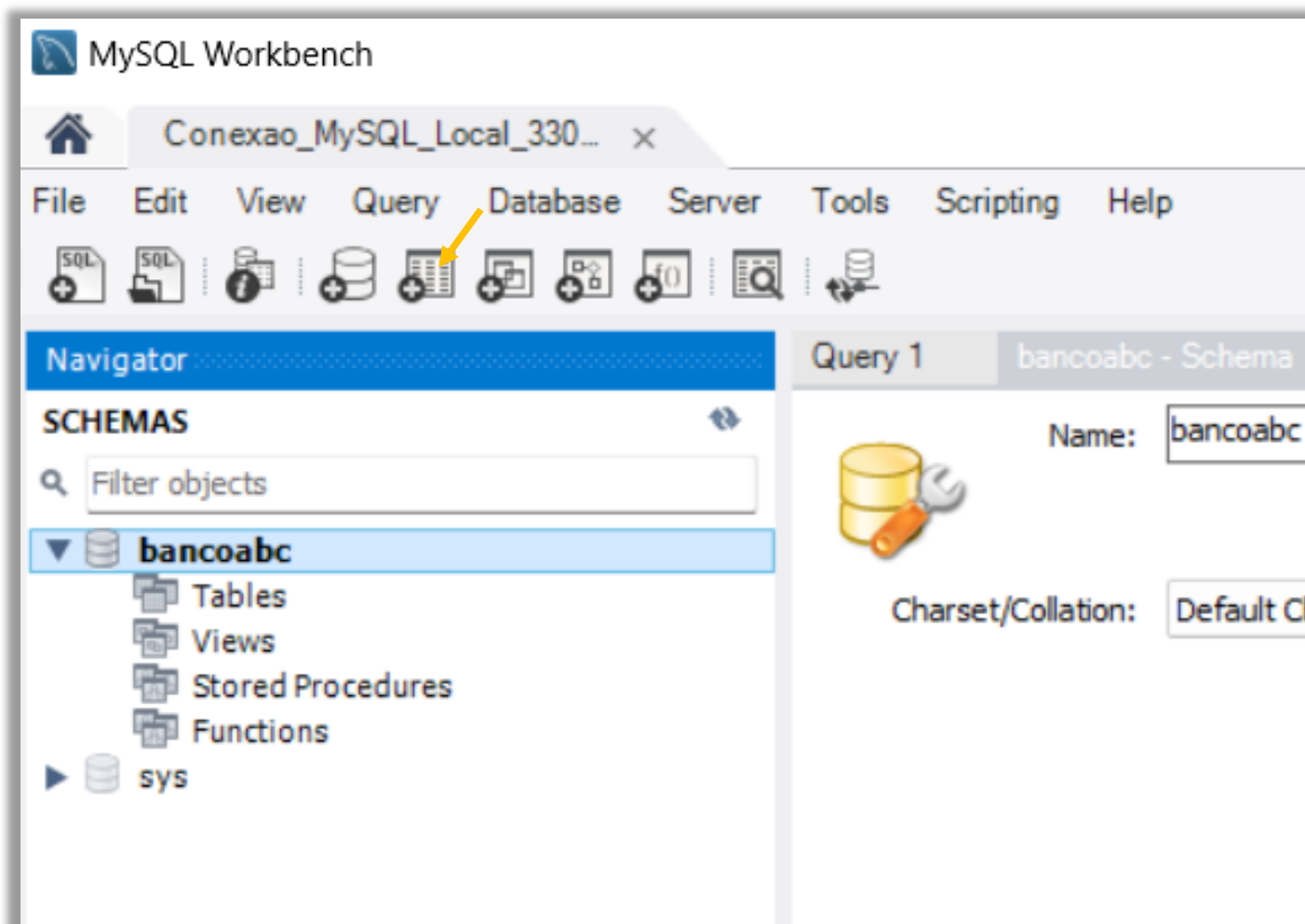
Workbench: Criando um Banco de Dados



Workbench: Criando um Banco de Dados



Workbench: Tabelas e Relacionamentos



Workbench: Tabelas e Relacionamentos










Table Name:

Schema: **bancoabc**

Charset/Collation:

Engine:

Comments:

| Column Name | Datatype | PK | NN | UQ | B | UN | ZF | AI | G | Default/Expression |
|---------------------------------------------------------------------------------------------|--------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------|
|  id | INT | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
|  nome | VARCHAR(50) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
|  telefone | BIGINT | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
|  email | VARCHAR(40) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
|  cpf | BIGINT | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
|  observacoes | VARCHAR(100) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Column Name:

Data Type:

Charset/Collation:

Default:

Comments:

Storage: ☐ Virtual ☐ Stored

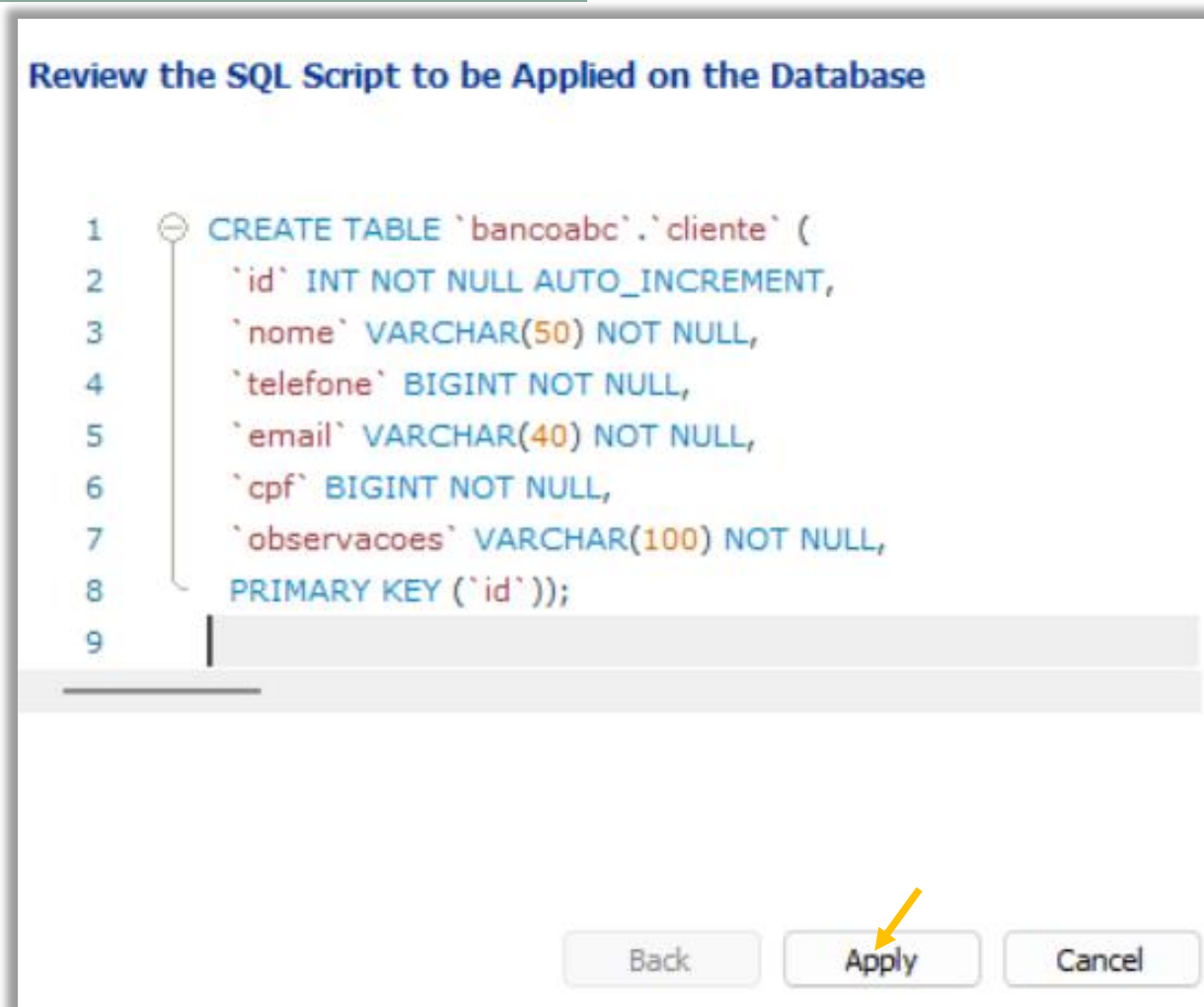
☒ Primary Key ☒ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

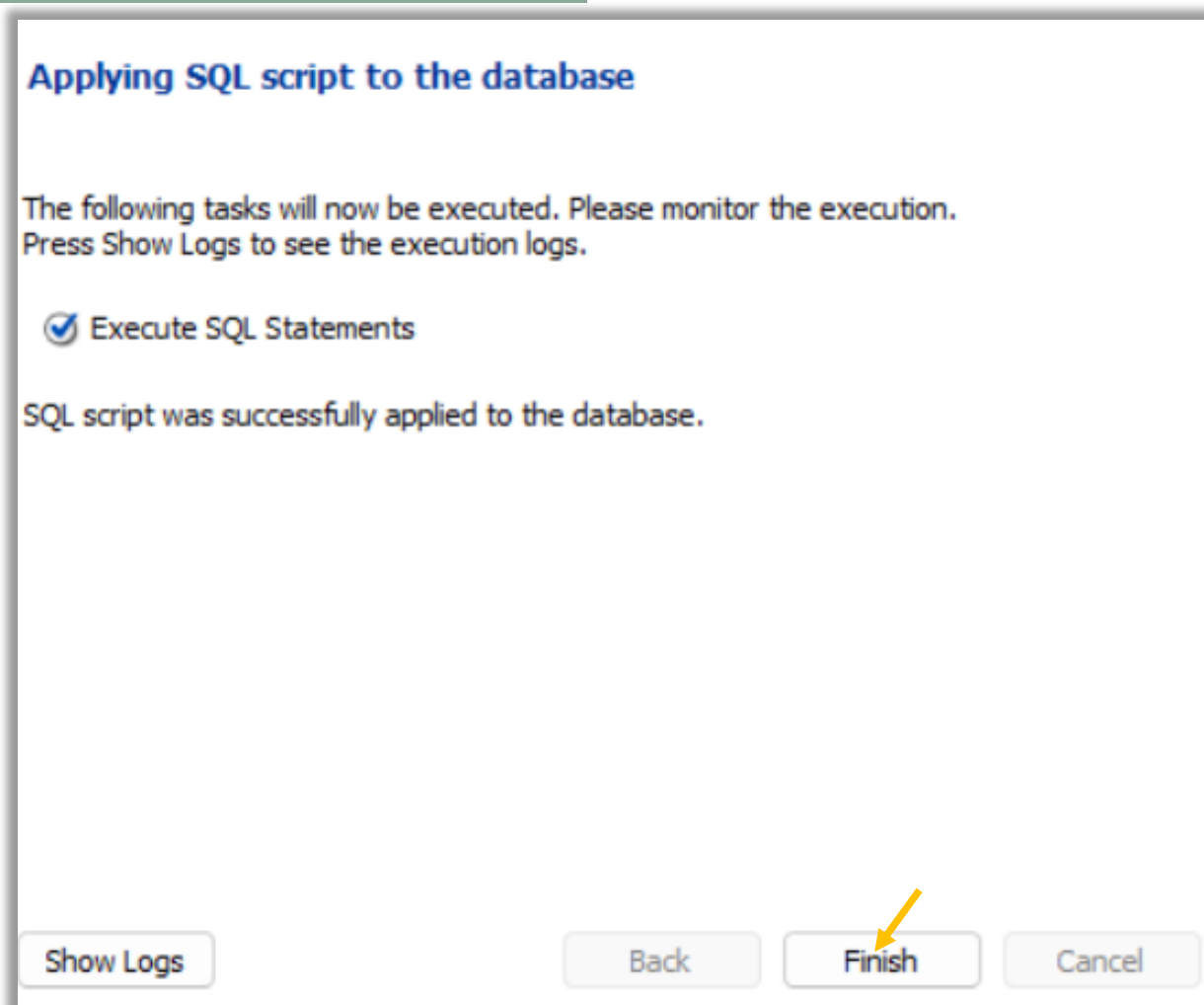
☒ Auto Increment ☐ Generated

Columns Indexes Foreign Keys Triggers Partitioning Options

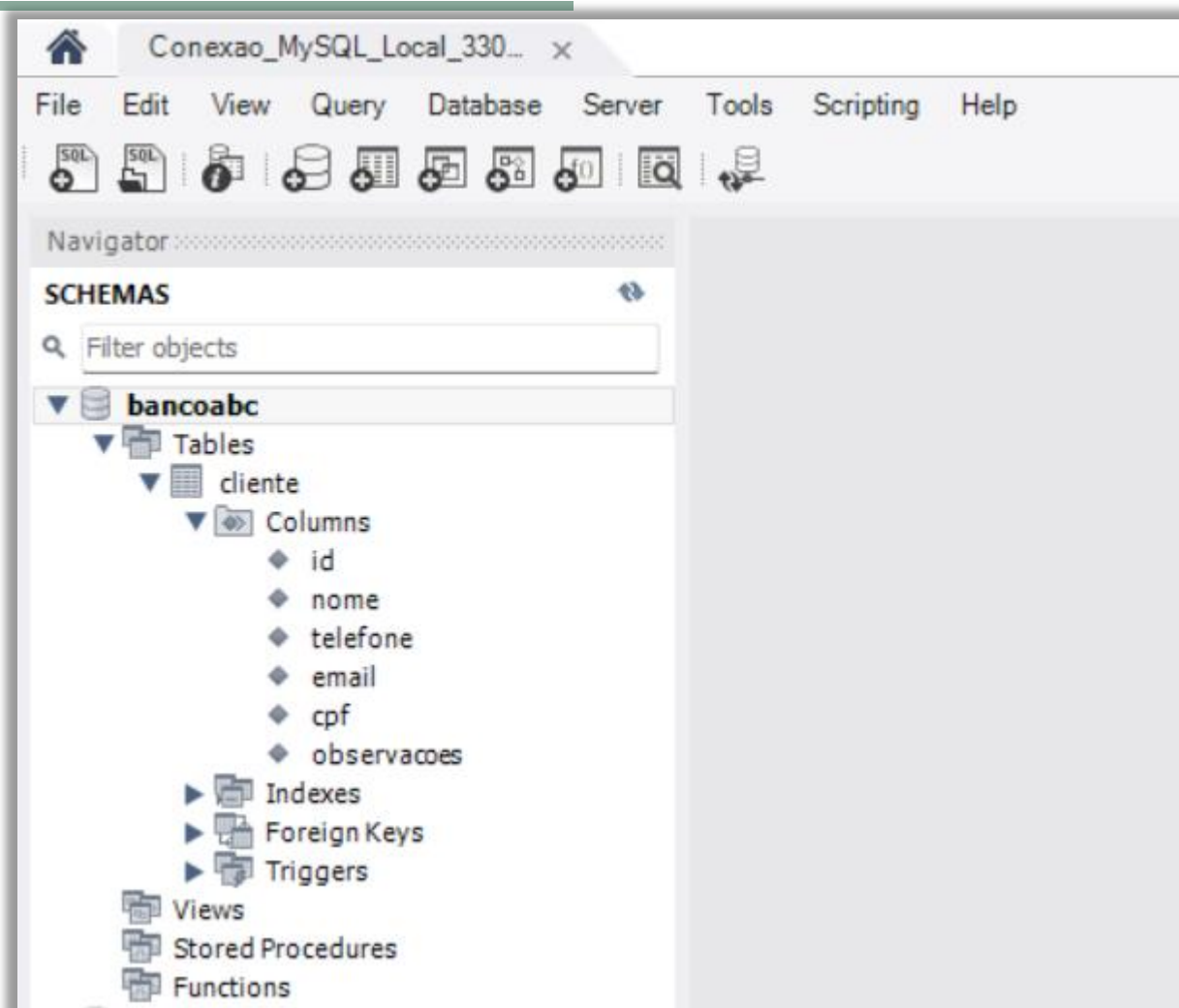
Workbench: Tabelas e Relacionamentos



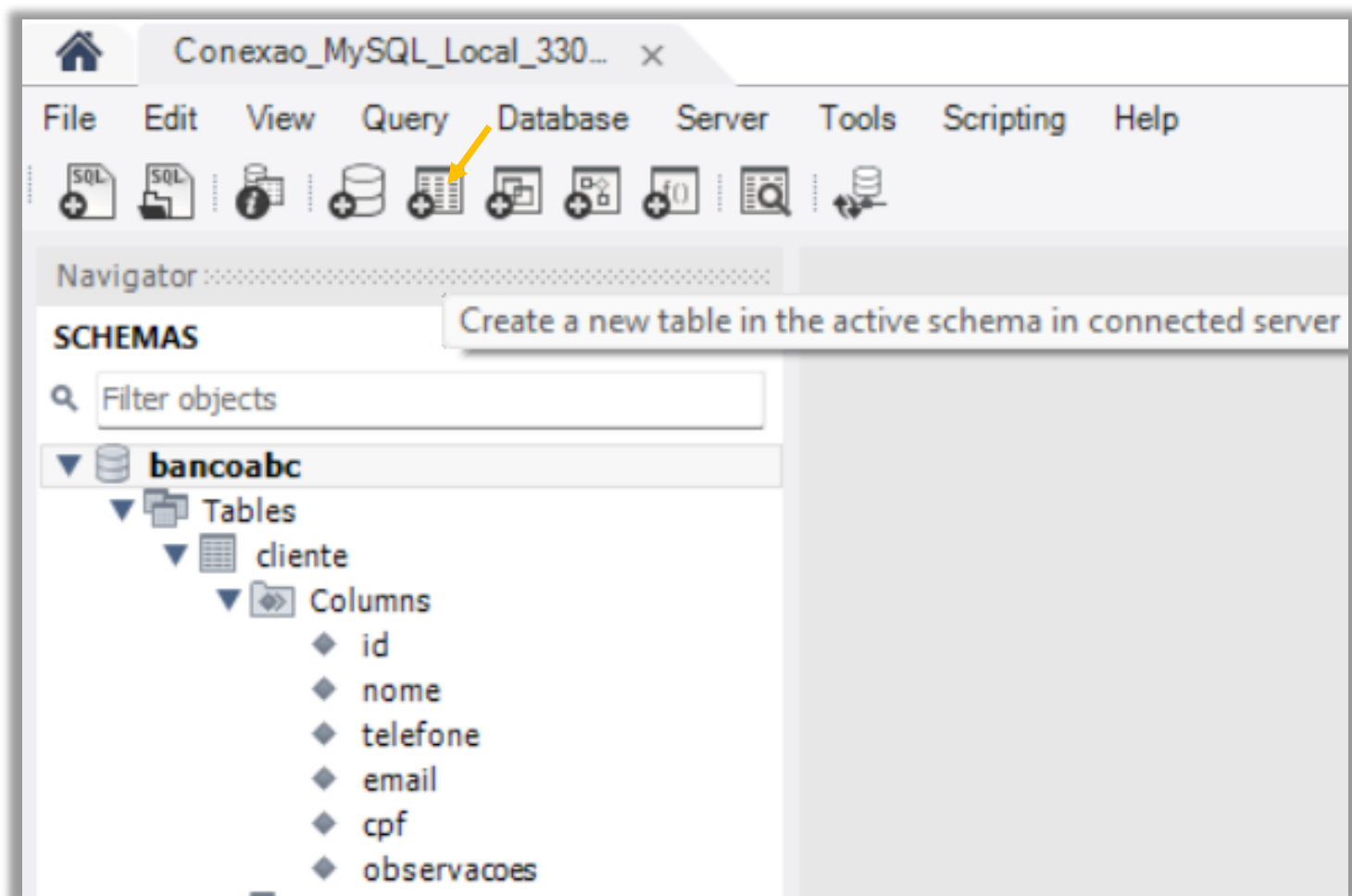
Workbench: Tabelas e Relacionamentos



Workbench: Tabelas e Relacionamentos



Workbench: Tabelas e Relacionamentos



Workbench: Tabelas e Relacionamentos









Table Name:

Schema: **bancoabc**

Charset/Collation:

Engine:

Comments:

| Column Name | Datatype | PK | NN | UQ | B | UN | ZF | AI | G | Default/Expression |
|-------------------------------------------------------------------------------------------|----------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------|
|  id | INT | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
|  numero | BIGINT | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
|  saldo | DOUBLE | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
|  limite | DOUBLE | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
|  clienteId | INT | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Column Name:

Charset/Collation:

Comments:

Data Type:

Default:

Storage: ☐ Virtual ☐ Stored

☐ Primary Key ☒ Not Null ☐ Unique

☐ Binary ☐ Unsigned ☐ Zero Fill

☐ Auto Increment ☐ Generated

Columns

Indexes

Foreign Keys

Triggers

Partitioning

Options

Apply

Revert

Workbench: Tabelas e Relacionamentos




Table Name: Schema: **bancoabc**

Charset/Collation: Engine:

Comments:

| Foreign Key Name | Referenced Table |
|------------------|----------------------|
| FK_conta_cliente | `bancoabc`.`cliente` |

| Column | Referenced Column |
|-----------------------------------------------|-------------------|
| <input type="checkbox"/> id | |
| <input type="checkbox"/> numero | |
| <input type="checkbox"/> saldo | |
| <input type="checkbox"/> limite | |
| <input checked="" type="checkbox"/> clienteId | id |

Foreign Key Options

On Update:

On Delete:

☐ Skip in SQL generation

Foreign Key Comment:

Columns Indexes **Foreign Keys** Triggers Partitioning Options

Workbench: Tabelas e Relacionamentos

Review the SQL Script to be Applied on the Database

```
1 CREATE TABLE `bancoabc`.`conta` (  
2   `id` INT NOT NULL AUTO_INCREMENT,  
3   `numero` BIGINT NOT NULL,  
4   `saldo` DOUBLE NOT NULL,  
5   `limite` DOUBLE NOT NULL,  
6   `clienteId` INT NOT NULL,  
7   PRIMARY KEY (`id`),  
8   INDEX `FK_conta_cliente_idx` (`clienteId` ASC) VISIBLE,  
9   CONSTRAINT `FK_conta_cliente`  
10  FOREIGN KEY (`clienteId`)  
11  REFERENCES `bancoabc`.`cliente` (`id`)  
12  ON DELETE NO ACTION  
13  ON UPDATE NO ACTION);
```

Back

Apply

Cancel



Workbench: Tabelas e Relacionamentos

Applying SQL script to the database

The following tasks will now be executed. Please monitor the execution.
Press Show Logs to see the execution logs.

☒ Execute SQL Statements

SQL script was successfully applied to the database.

Show Logs

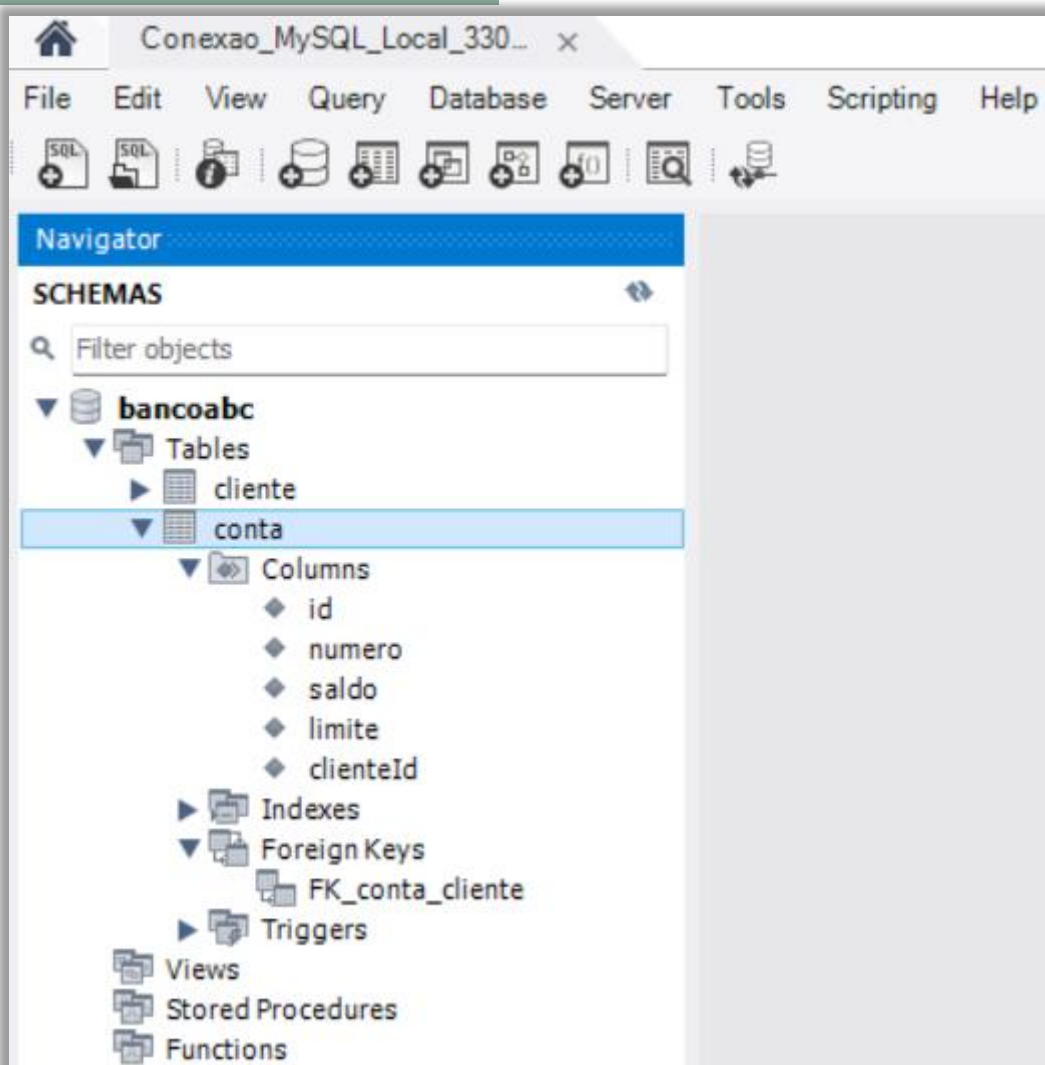
Back

Finish

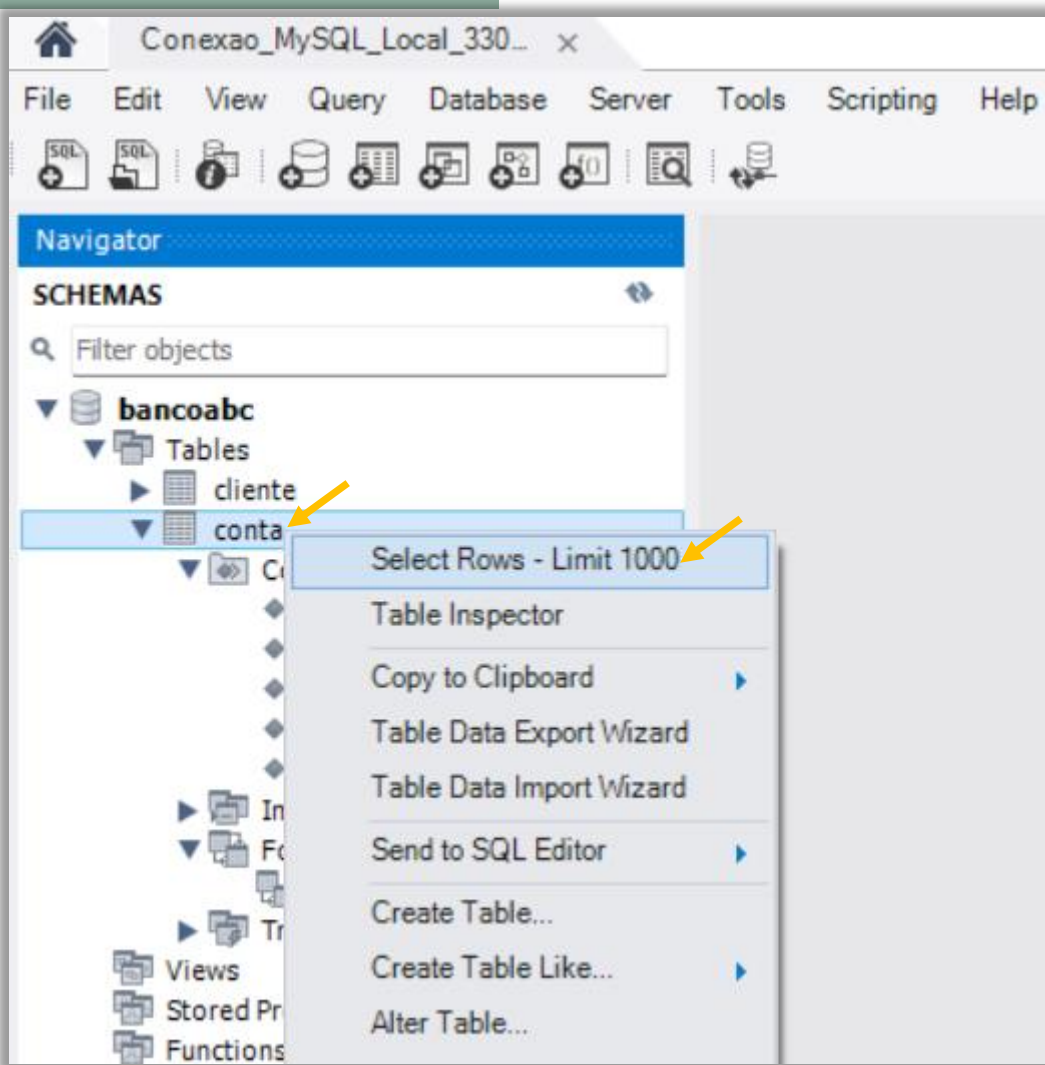
Cancel



Workbench: Tabelas e Relacionamentos



Workbench: Exibindo Dados da Tabela



Workbench: Exibindo Dados da Tabela

The screenshot shows the MySQL Workbench interface. At the top, a tab labeled 'conta' is active. Below the tab is a toolbar with various icons, including a 'Limit to 1000 rows' dropdown. The SQL editor contains the query: `1 • SELECT * FROM bancoabc.conta;`. Below the editor, the 'Result Grid' tab is selected, displaying a table with the following columns: `id`, `numero`, `saldo`, `limite`, and `clienteId`. The first row of data shows all columns as `NULL`. To the right of the table, a blue button labeled 'Result Grid' is visible. Below the table, the 'Output' section is expanded, showing 'Action Output'. The output log contains one entry: a green checkmark, the number '1', the time '00:39:33', the query text 'SELECT * FROM bancoabc.conta LIMIT 0, ...', the message '0 row(s) returned', and the duration '0.000 sec / 0.000 sec'.

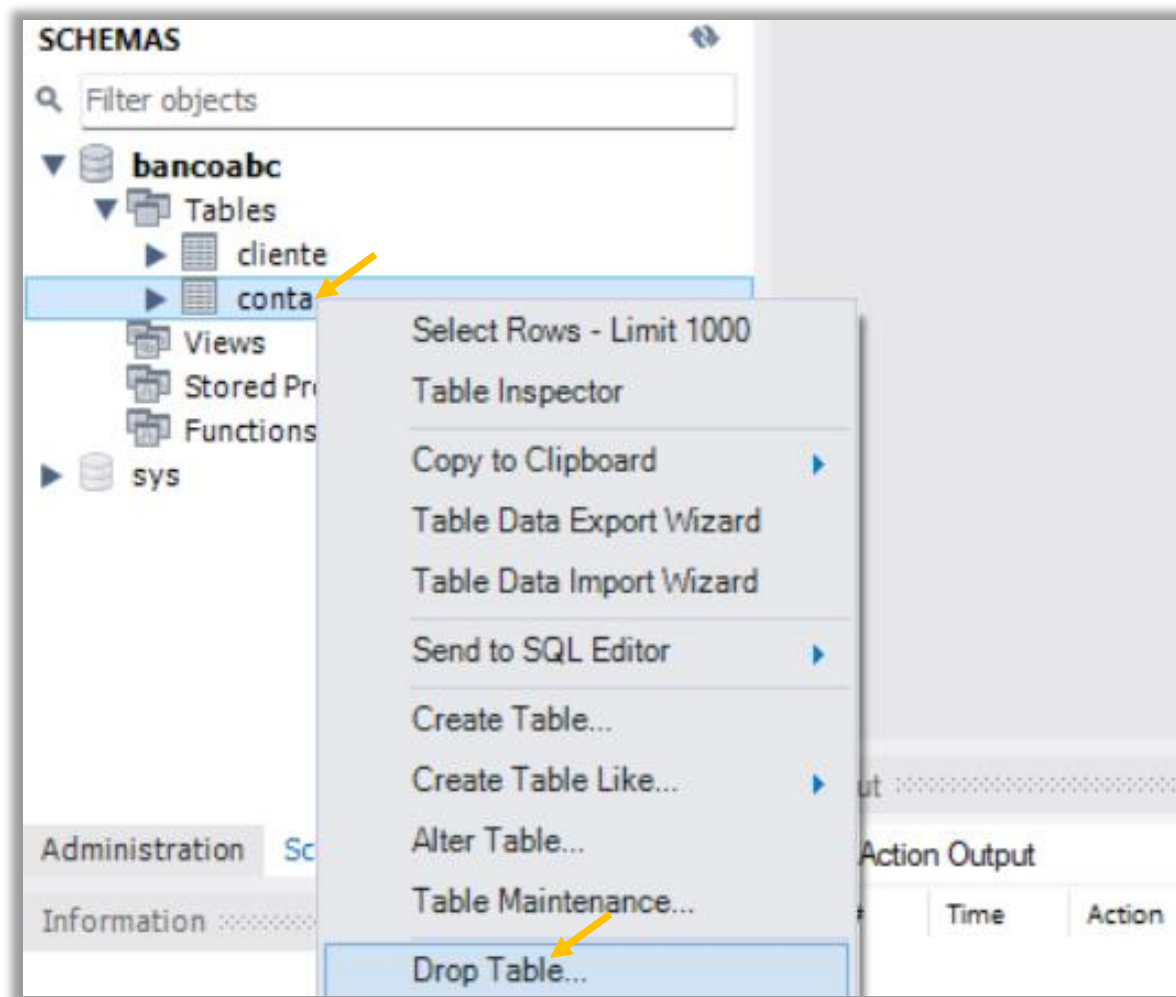
| id | numero | saldo | limite | clienteId |
|------|--------|-------|--------|-----------|
| NULL | NULL | NULL | NULL | NULL |

Output: Action Output

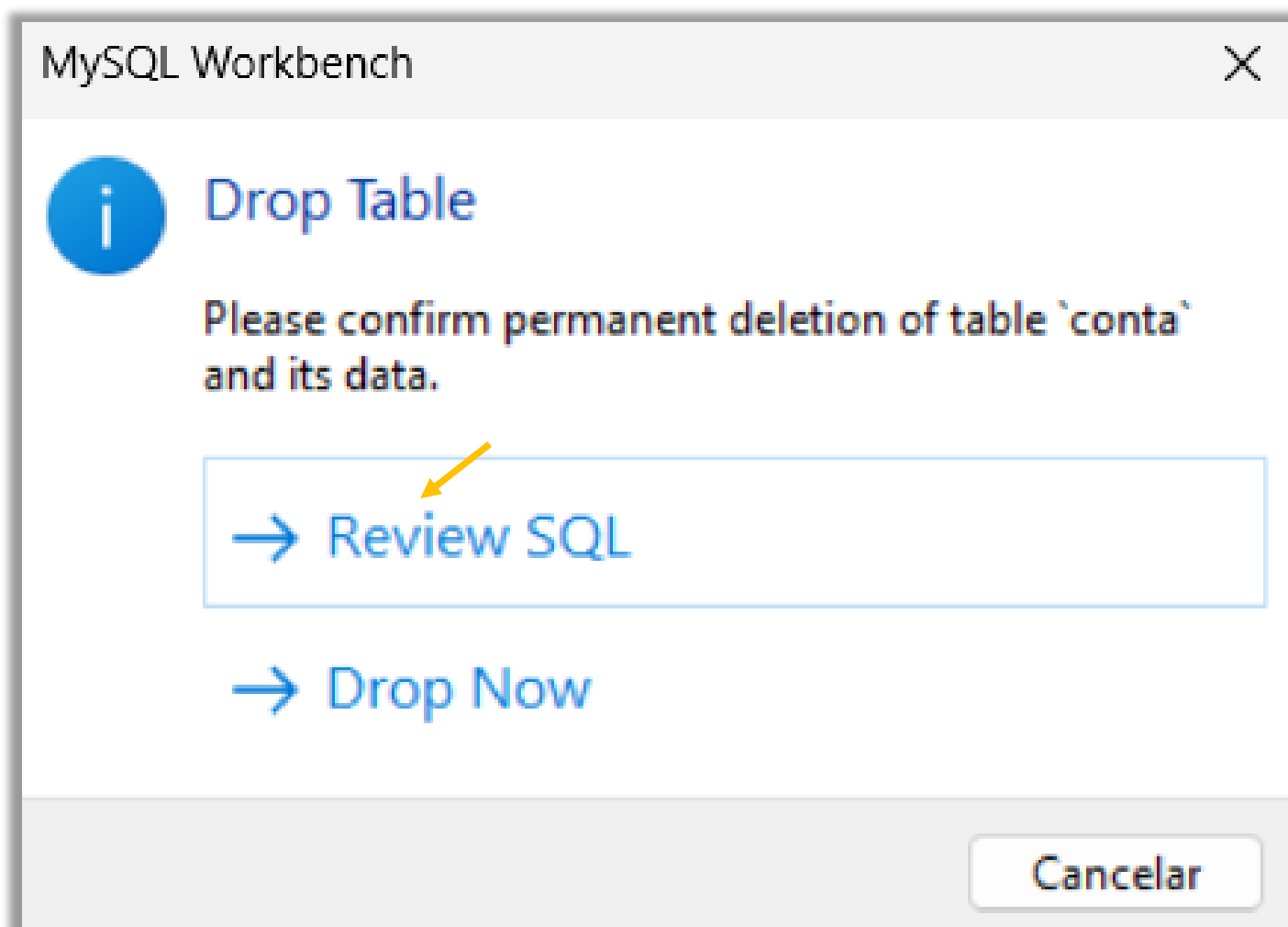
| # | Time | Action | Message | Duration / Fetch |
|-----|----------|-------------------------------------------|-------------------|-----------------------|
| ✓ 1 | 00:39:33 | SELECT * FROM bancoabc.conta LIMIT 0, ... | 0 row(s) returned | 0.000 sec / 0.000 sec |



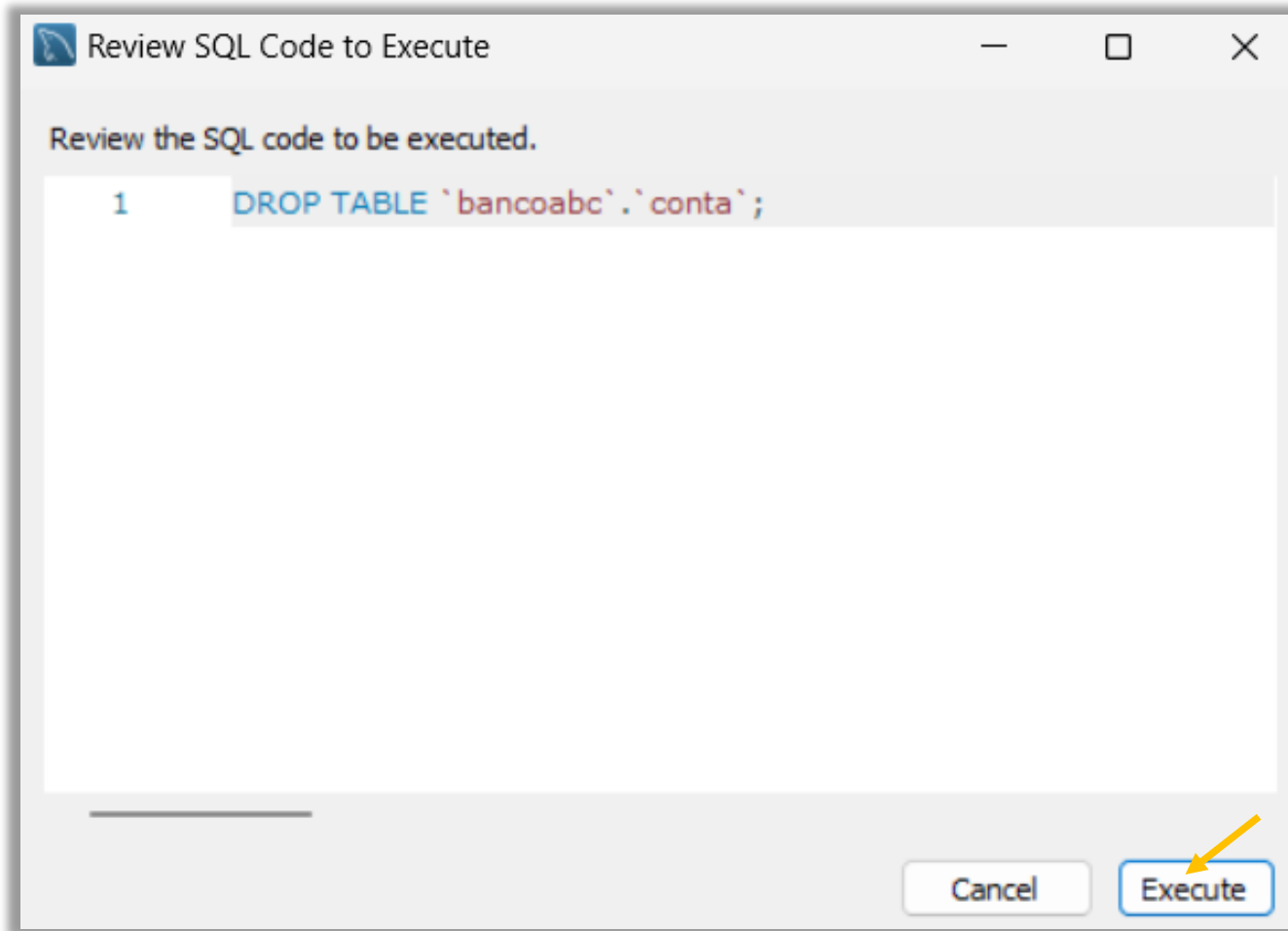
Workbench: Excluindo Tabela



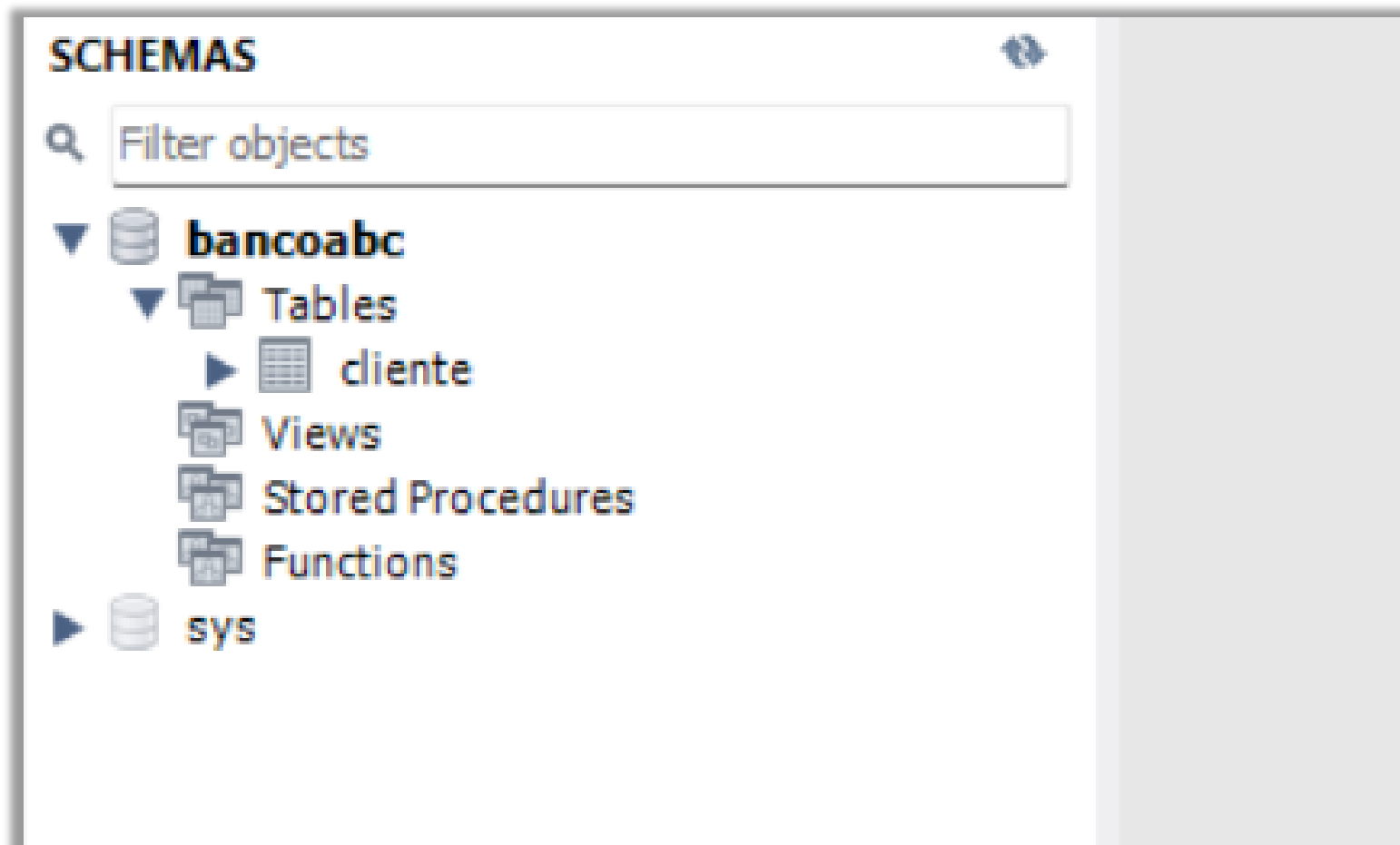
Workbench: Excluindo Tabela



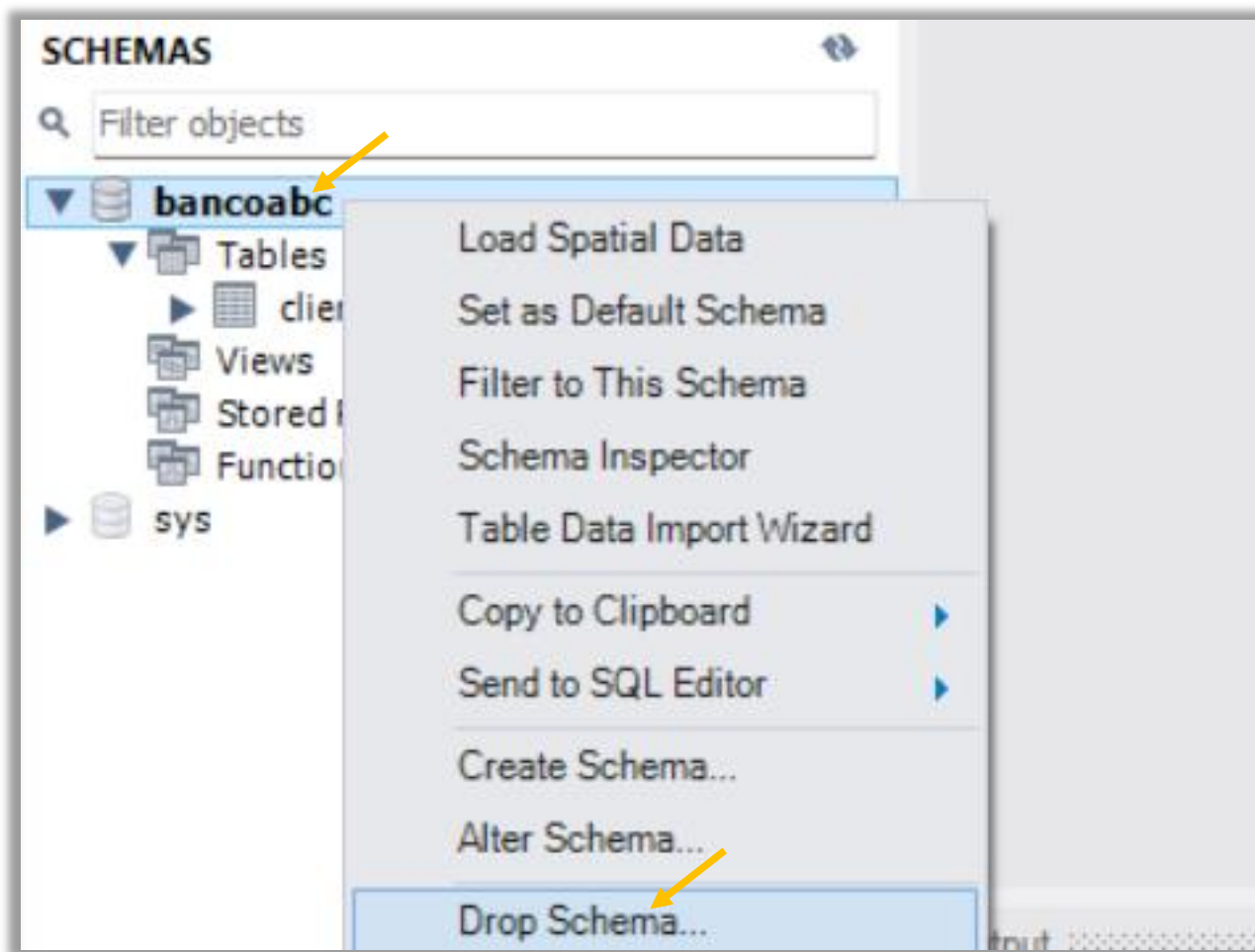
Workbench: Excluindo Tabela



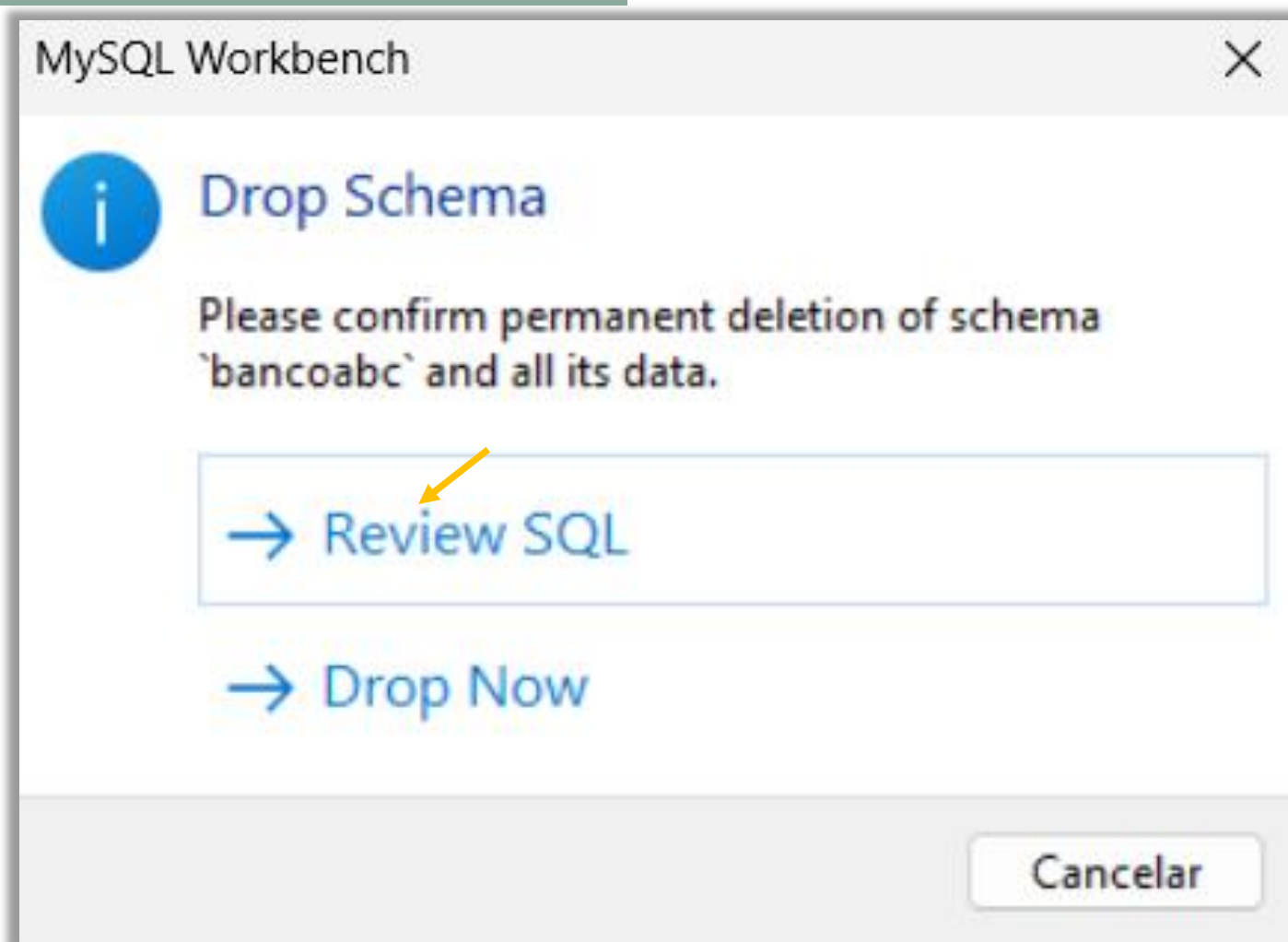
Workbench: Excluindo Tabela



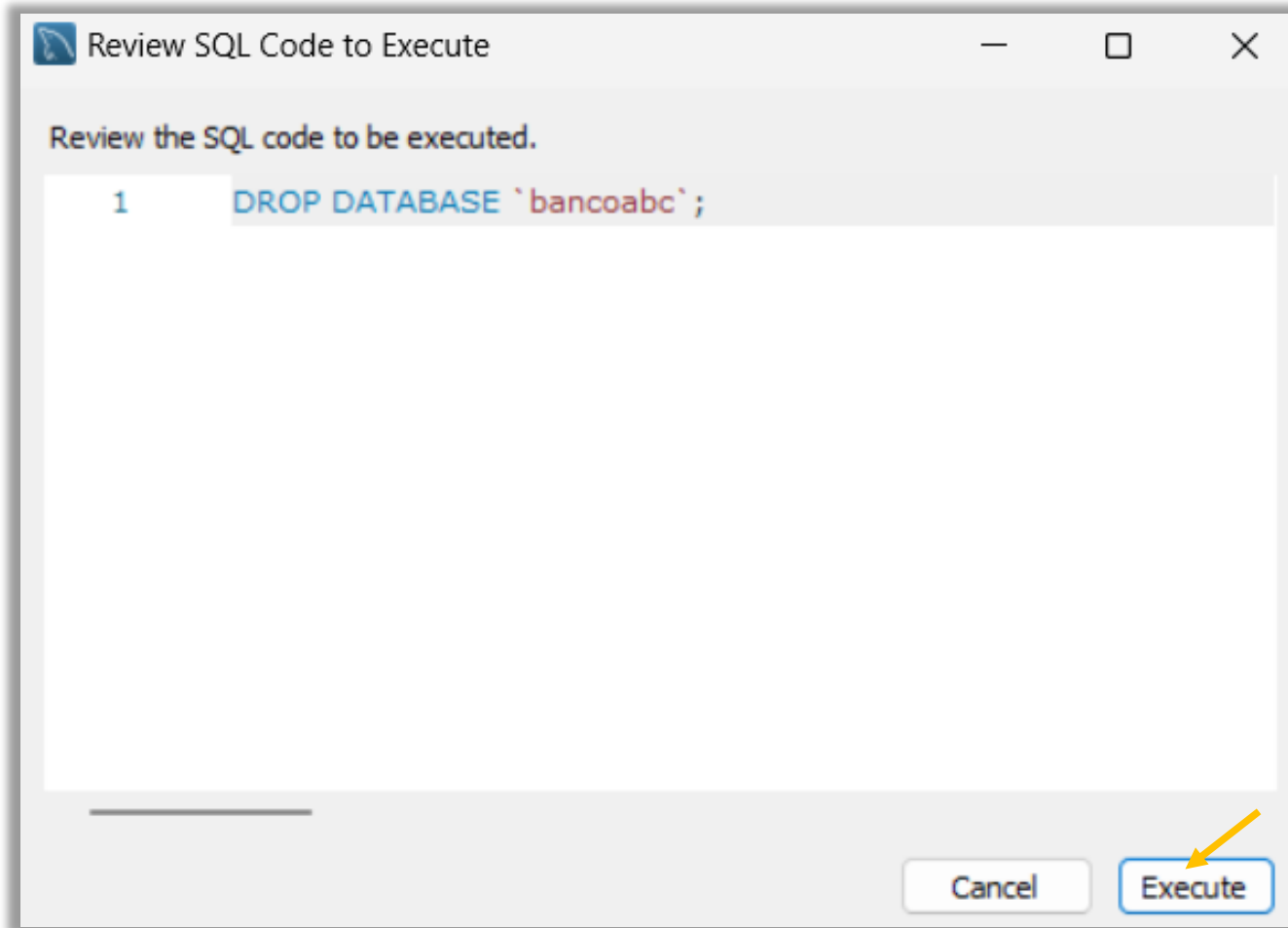
Workbench: Excluindo Tabela



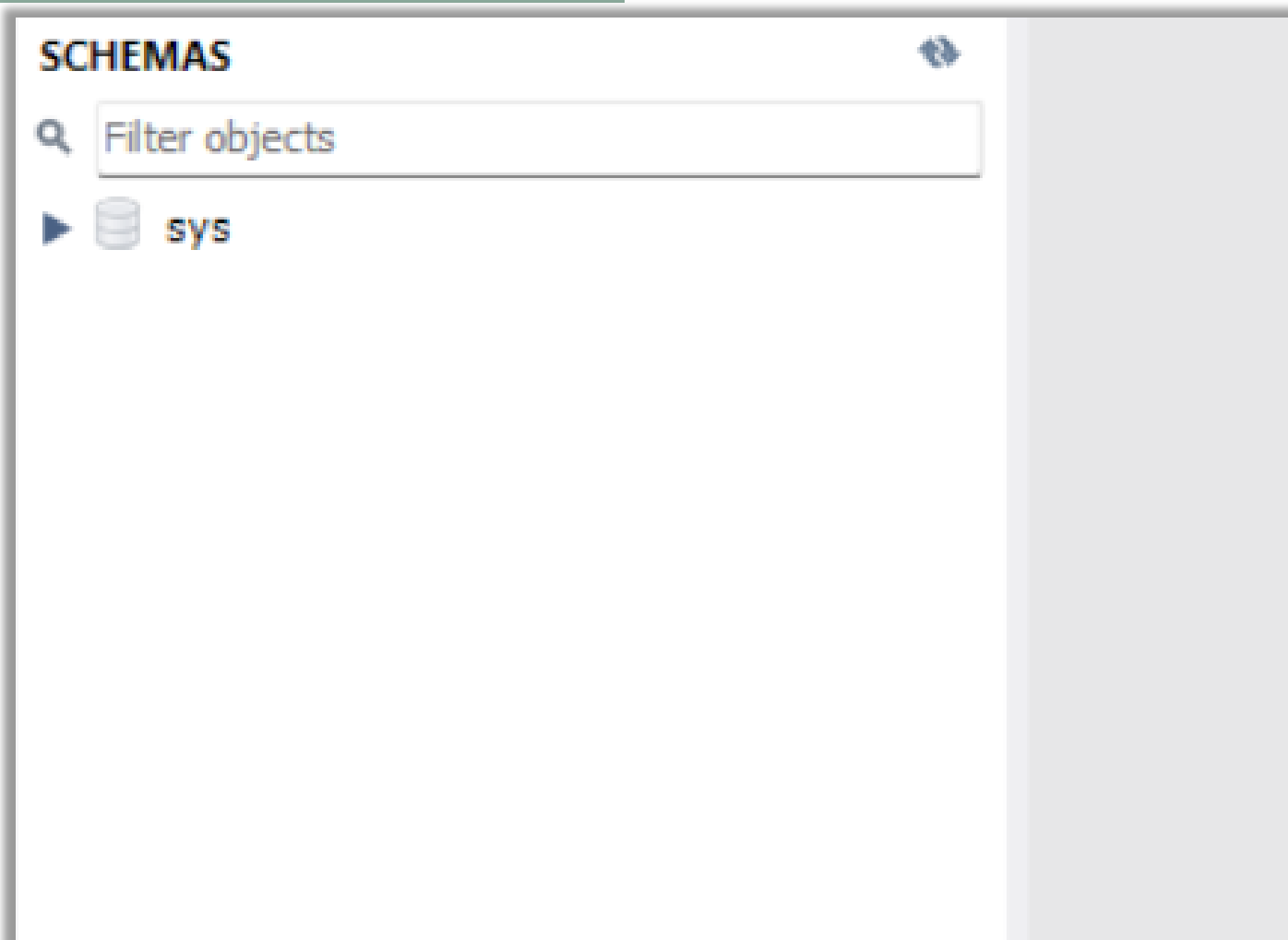
Workbench: Excluindo Tabela



Workbench: Excluindo Tabela



Workbench: Excluindo Tabela



Exercícios

- 1) Abra uma conexão com o MySQL utilizando Workbench, conforme apresentado nos slides anteriores.
- 2) Conectado ao MySQL através do Workbench, crie os exemplos apresentados nos slides anteriores.



Obrigado!

Questões?

