

# MySQL Workbench Tutorial

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## Introduction

This tutorial introduces you to the use of the MySQL Workbench, a way to communicate with a MySQL database via a graphical user interface (GUI). You will use Workbench to query the Schools database named **aproposl\_school** located on a MySQL database management server (DBMS) running on a remote web hosting site.

You may find it easier to start with the MySQL Shell and then move to the Workbench.

## Installation

Go to <https://dev.mysql.com/downloads/> to download and install MySQL Workbench. If you would rather run the MySQL DBMS locally, then also download and install the MySQL Community Server, which is the free version of the DBMS.

## Start the MySQL Workbench

To start the MySQL Workbench on MacOS, open it from the Applications folder (Figure 1).

To start the MySQL Workbench in Windows 10, first click the Windows icon in the lower left corner of your screen, scroll to **MySQL**, drop down the menu, and click on **MySQL Workbench** (Figure 2).

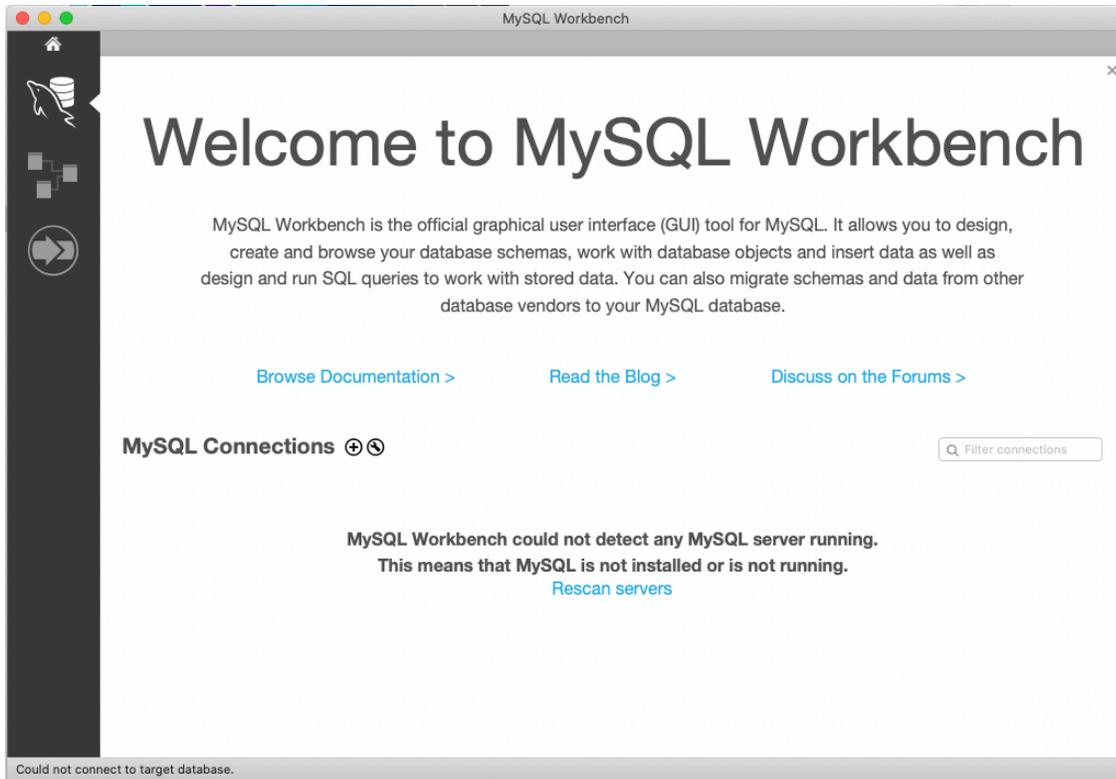


Figure 1. MySQL Workbench startup window on MacOS.

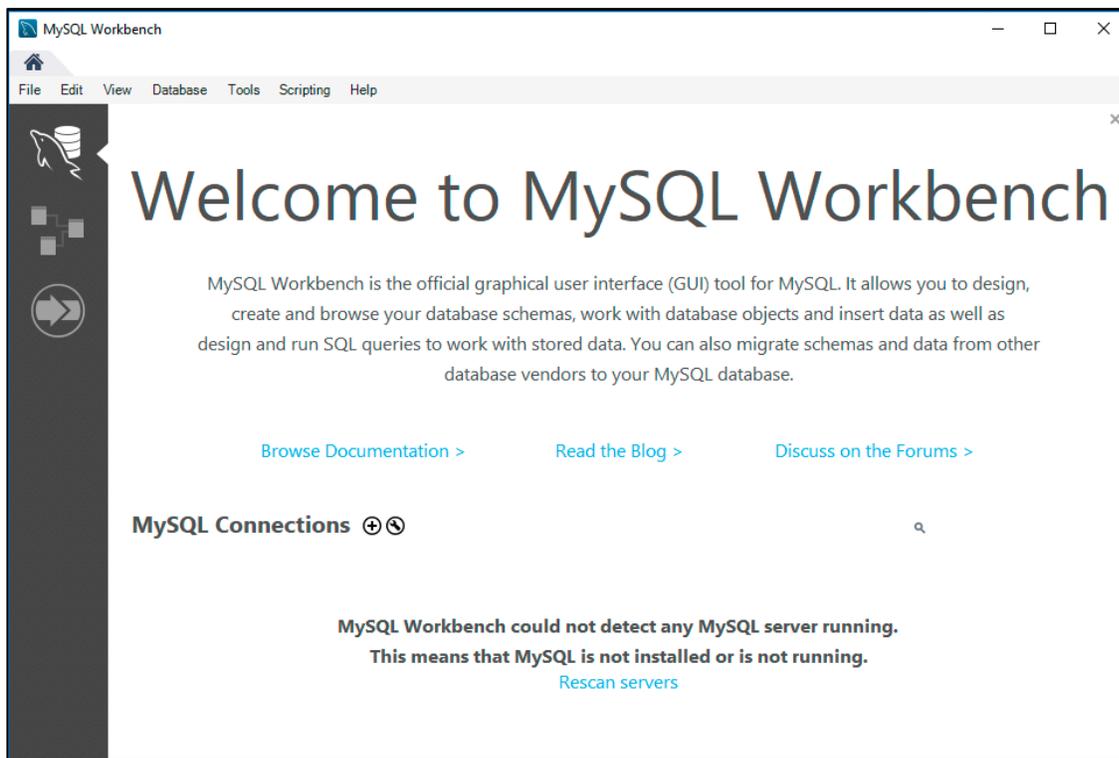


Figure 2. MySQL Workbench startup window in Windows 10.

## Connect to the Remote Database

Click the **+** next to **MySQL Connections**. In the **Setup New Connection** dialog box, enter the following:

Field	Entry
Connection Name	School
Hostname	apropos-logic.com
Username	aproposl_school
Password	school

Setup New Connection

Connection Name:  Type a name for the connection

Connection Method:  Method to use to connect to the RDBMS

Parameters SSL Advanced

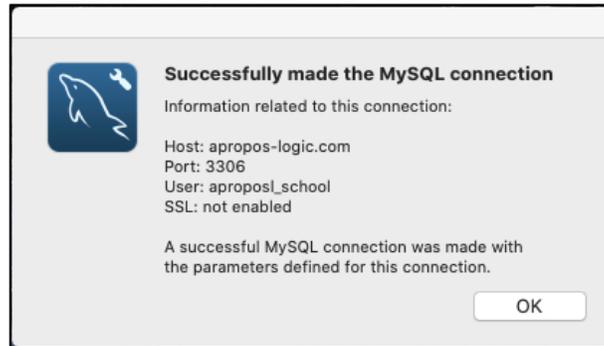
Hostname:  Port:  Name or IP address of the server host - and TCP/IP port.

Username:  Name of the user to connect with.

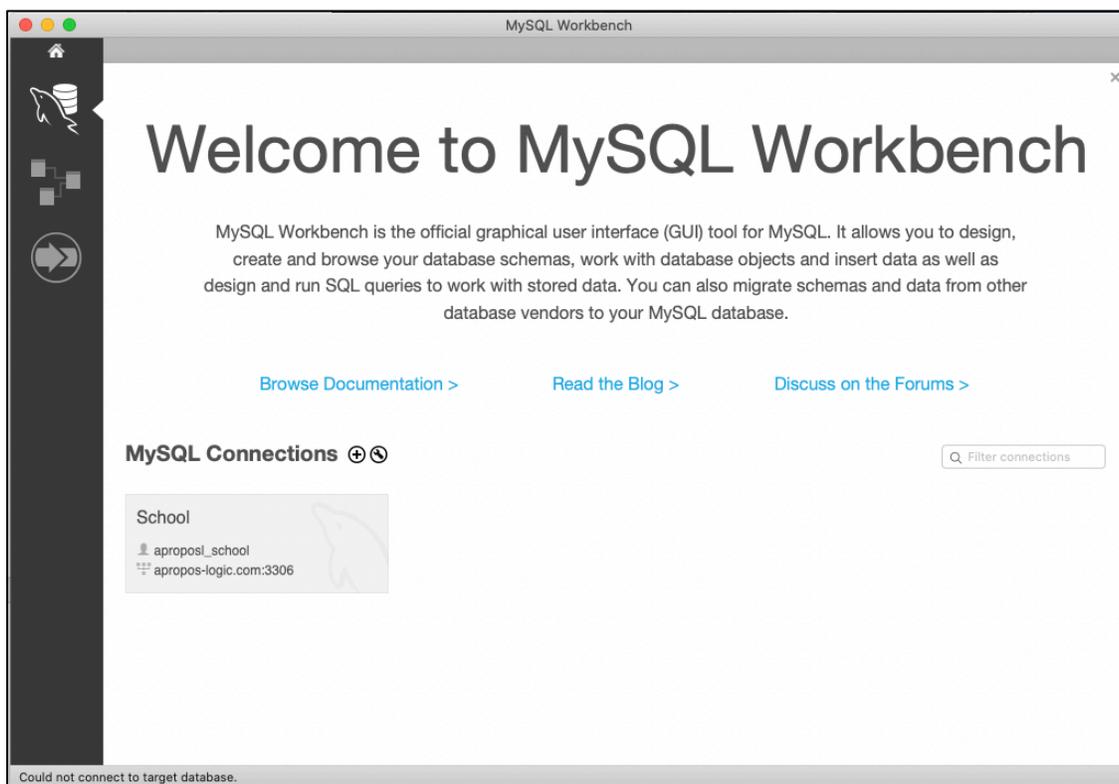
Password:   The user's password. Will be requested later if it's not set.

Default Schema:  The schema to use as default schema. Leave blank to select it later.

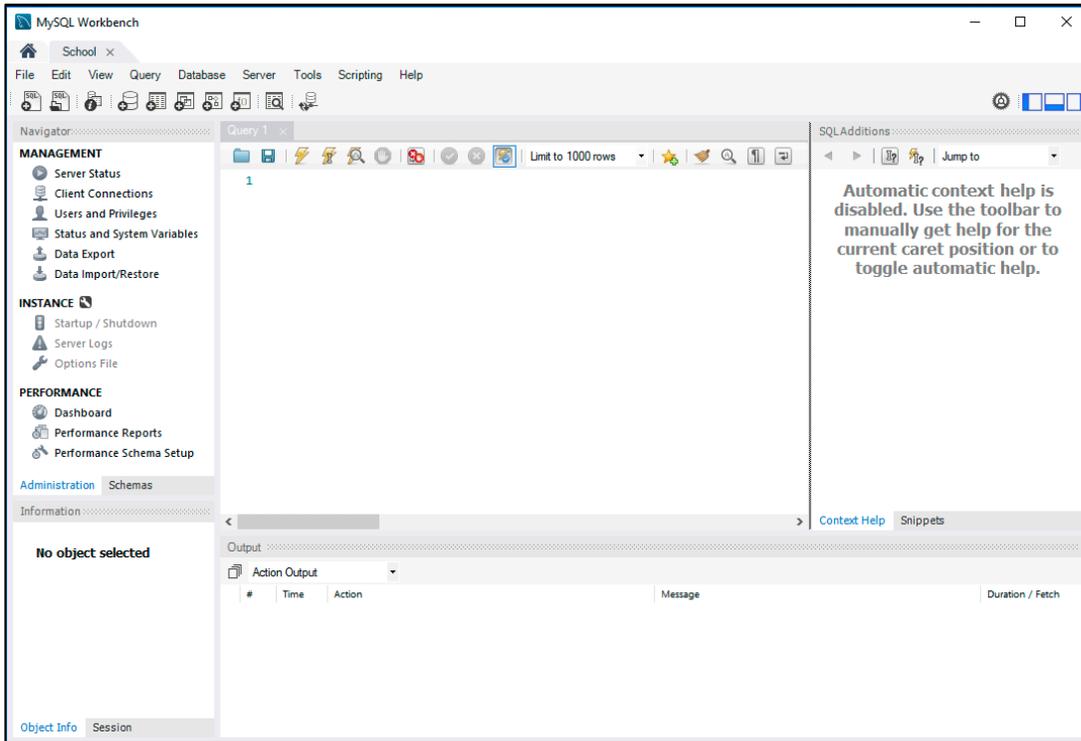
Click the **Test Connection** button. If successful, you will see:



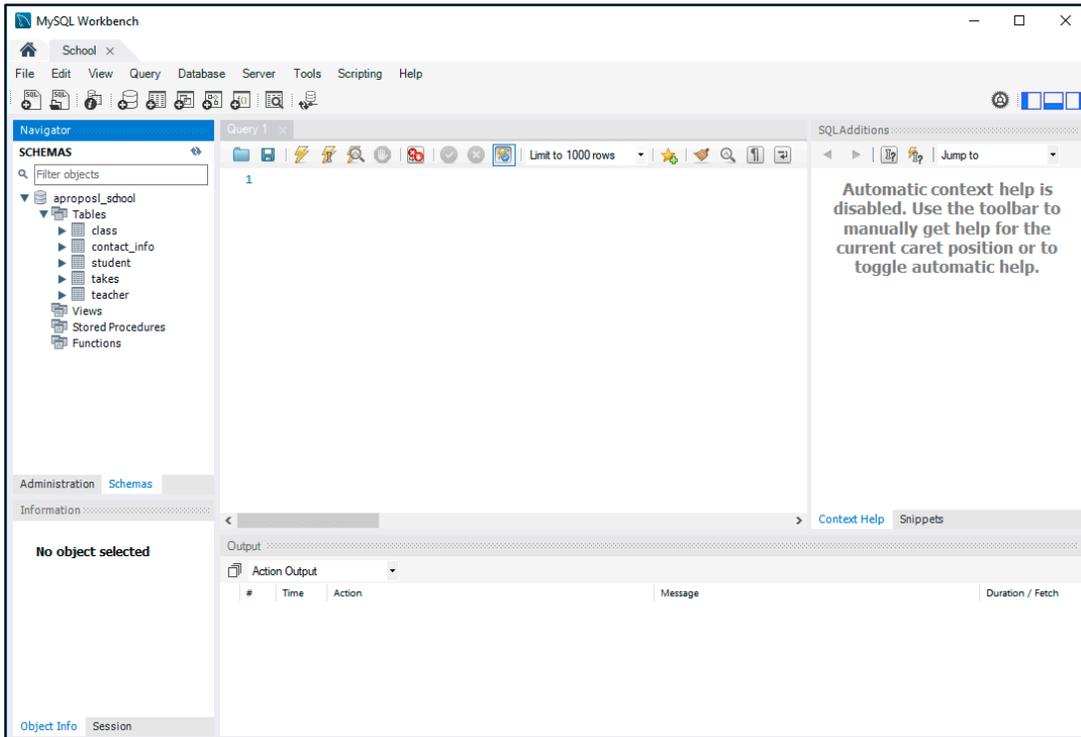
Click the **OK** button in this window, and then click the **OK** button in the **Setup New Connection** dialog box. The new remote database connection should now appear:



Click on the **School** connection, and an SQL Editor window will open:

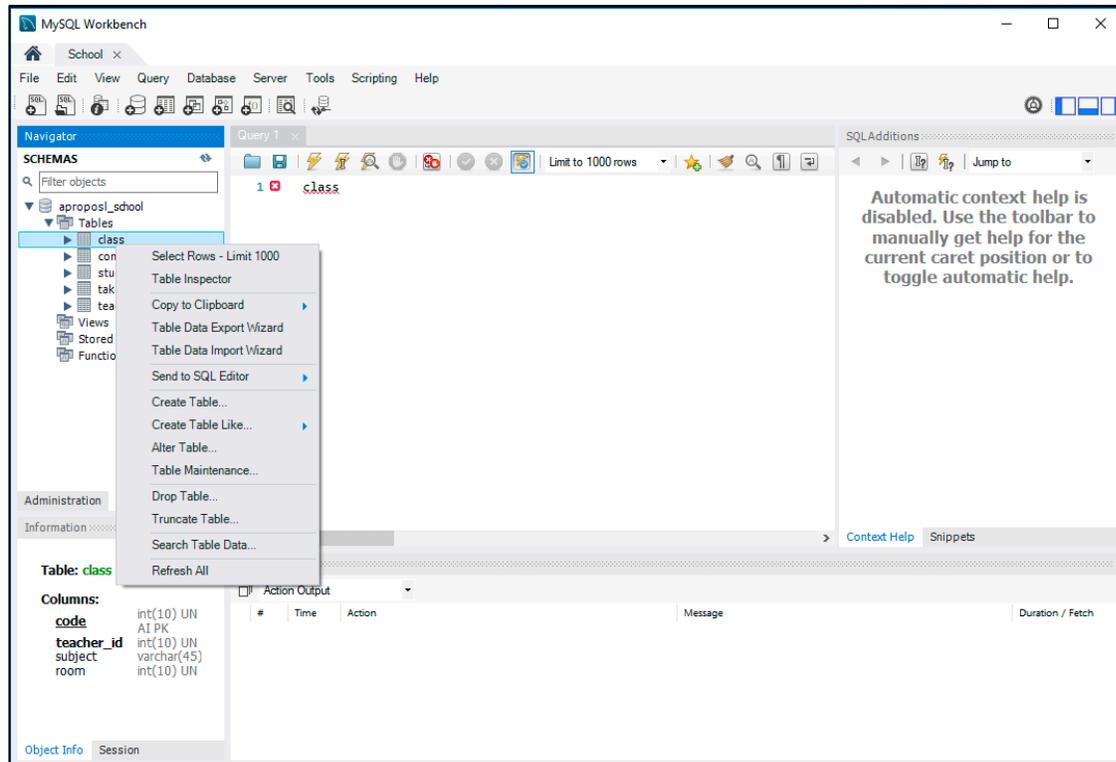


Click on the **Schemas** tab to see the database **aproposl\_school**. You should be able to see the names of the tables:

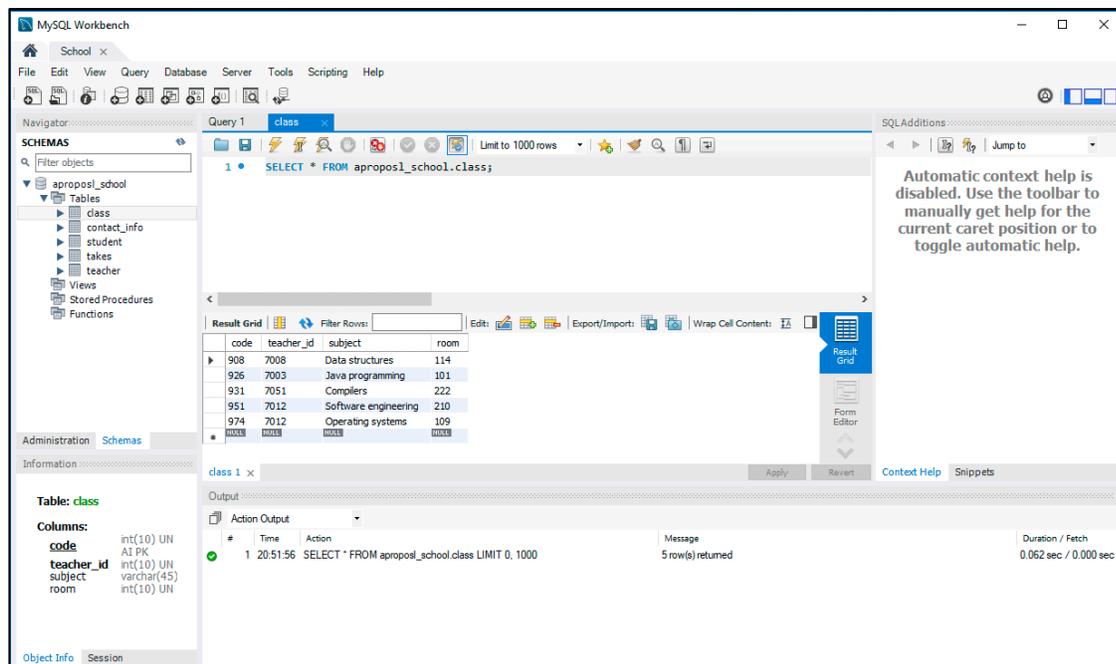


## Enter SQL commands

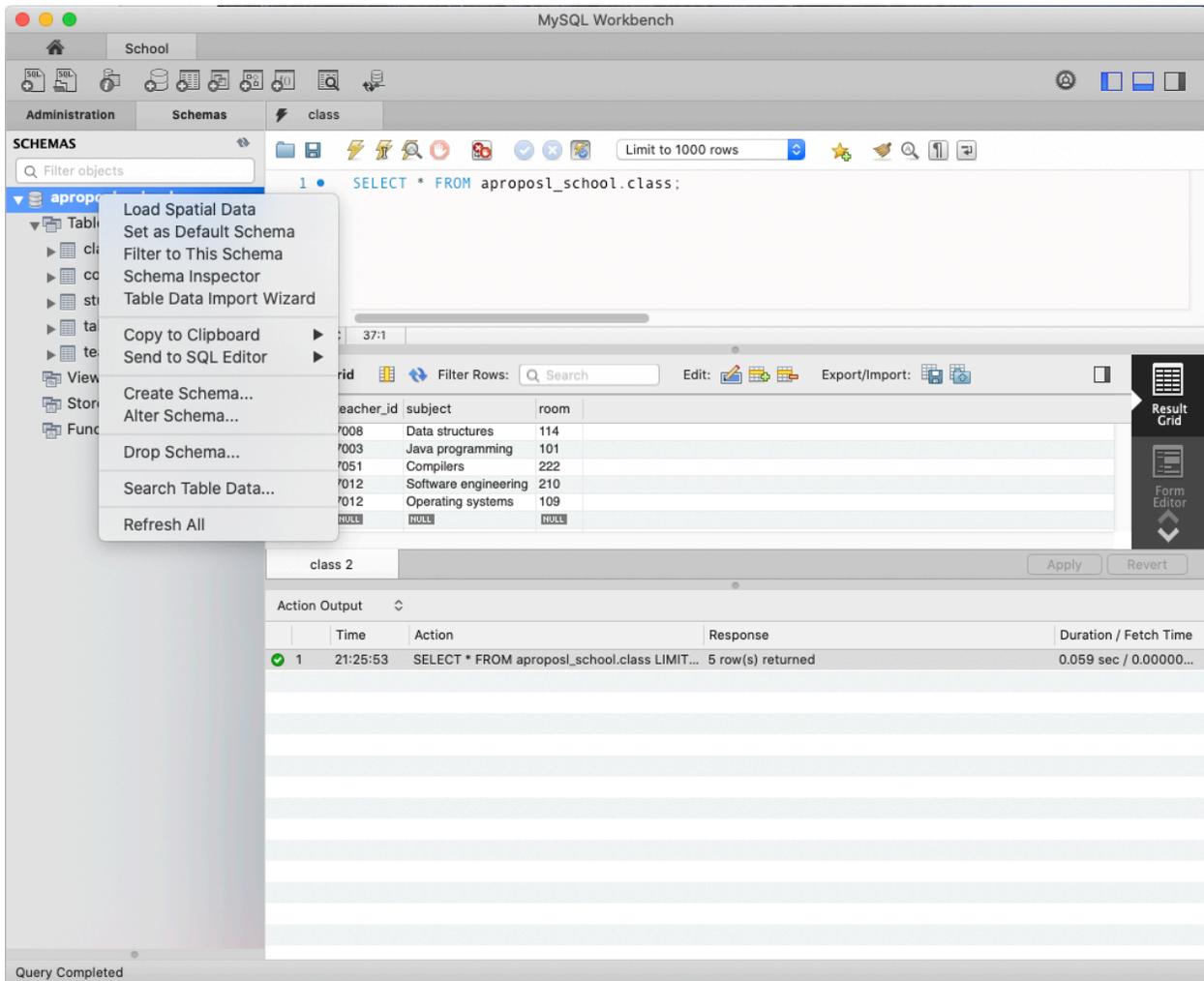
It is easy to quickly see the contents of a table. For example, to see what's in the Class table, first select the table name, right-click (or, on a one-button Mac mouse, control-click), and choose the **Select Rows** menu item:



You will see the SQL query command **SELECT \* FROM apropos1\_school.class** and the table contents in the **Result Grid**:



Right-click the database name **aproposl\_school** and select **Set as Default Schema**:



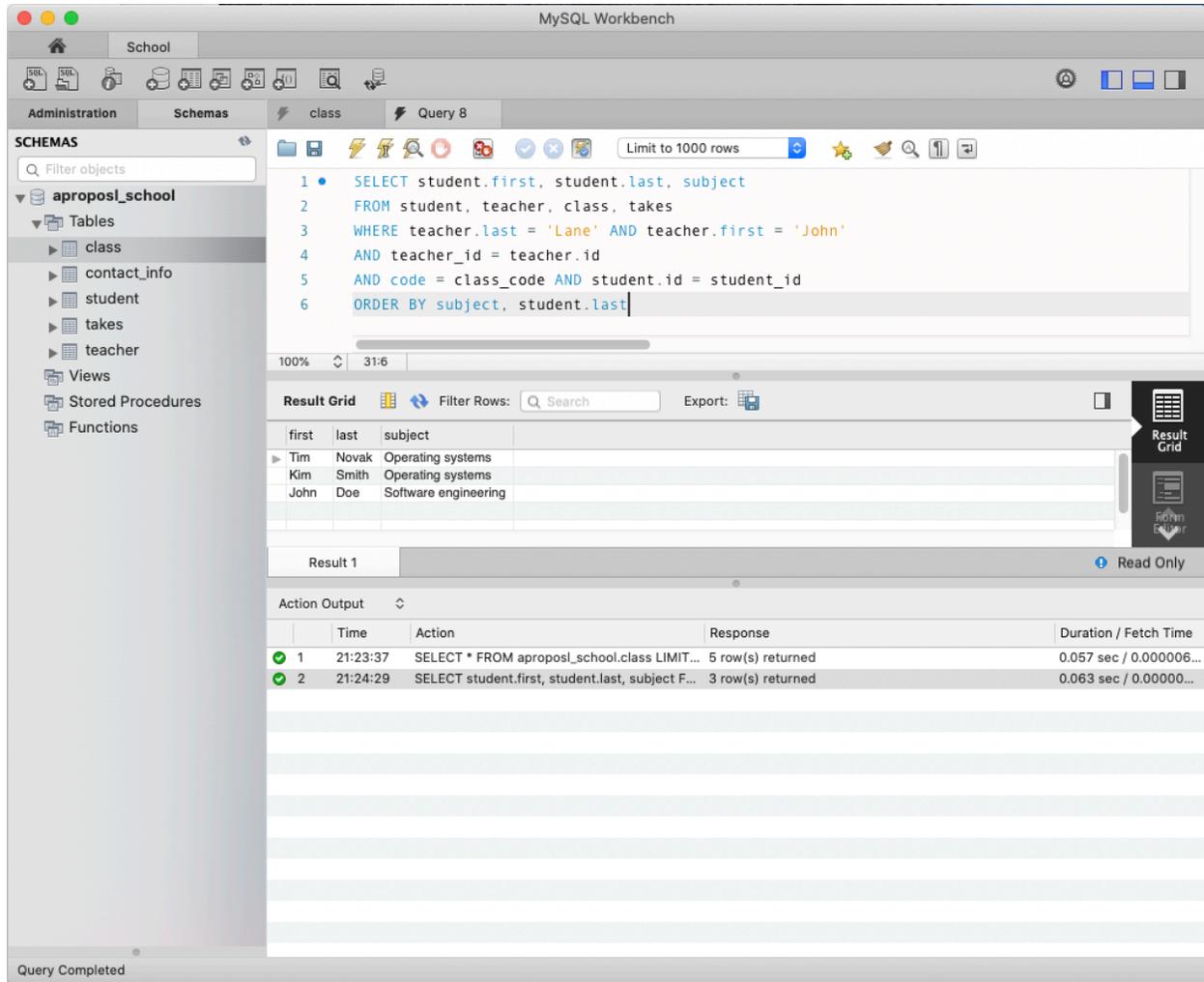
The screenshot shows the MySQL Workbench interface. The 'Schemas' pane on the left shows a tree view with 'aproposl\_school' selected. A context menu is open over 'aproposl\_school', listing various actions. The 'Set as Default Schema' option is highlighted. The main query window shows a SQL query: `SELECT * FROM aproposl_school.class;`. The result grid below the query shows the following data:

teacher_id	subject	room
7008	Data structures	114
7003	Java programming	101
7051	Compilers	222
7012	Software engineering	210
7012	Operating systems	109
NULL	NULL	NULL

The 'Action Output' pane at the bottom shows the execution details of the query:

	Time	Action	Response	Duration / Fetch Time
✓ 1	21:25:53	SELECT * FROM aproposl_school.class LIMIT...	5 row(s) returned	0.059 sec / 0.00000...

Now you can enter and edit arbitrary SQL commands without needing to explicitly name the database in the commands. After entering a command, click the yellow lightning bolt ⚡ above the command to tell Workbench to execute it:



The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'apropos\_school' selected. The main window shows a SQL query in the 'Query Editor':

```
1 • SELECT student.first, student.last, subject
2 FROM student, teacher, class, takes
3 WHERE teacher.last = 'Lane' AND teacher.first = 'John'
4 AND teacher_id = teacher.id
5 AND code = class_code AND student.id = student_id
6 ORDER BY subject, student.last
```

The 'Result Grid' below the query shows the following data:

first	last	subject
Tim	Novak	Operating systems
Kim	Smith	Operating systems
John	Doe	Software engineering

The 'Action Output' pane at the bottom shows the execution details:

	Time	Action	Response	Duration / Fetch Time
1	21:23:37	SELECT * FROM apropos_school.class LIMIT...	5 row(s) returned	0.057 sec / 0.000006...
2	21:24:29	SELECT student.first, student.last, subject F...	3 row(s) returned	0.063 sec / 0.000000...

The status bar at the bottom indicates 'Query Completed'.

MySQL Workbench documentation:  
<https://dev.mysql.com/doc/workbench/en/>