



School of Engineering

Course: EGDF20 Diploma in Electronic and Computer Engineering

Module: EGE311 Database Design & Applications

Practical 1: Introduction to MySQL and MySQL Workbench

Learning Objectives:

1. Installing MySQL Server and MySQL Workbench
2. Connecting to MySQL Server with MySQL Workbench

Exercise 1: Install MySQL Server and MySQL Workbench

Install Microsoft Visual C++ Redistributable

1. If your computer has Visual Studio installed go to Step 4. Else continue with next step
2. Go to BrightSpace software section and follow the link to download Microsoft Visual C++ Redistributable to your desktop.
3. Install Microsoft Visual C++ Redistributable to your computer.

Install PyCharm Community Edition

4. If your computer has Python and the relevant IDE installed go to Step 7. Else continue with next step.
5. Go to BrightSpace software section and follow the link to download the latest version of PyCharm Community Edition to your desktop.
6. Install PyCharm Community Edition to your computer.
7. Start and create a default project in PyCharm to allow the system to setup the environment.

Install MySQL Community Server

8. Go to BrightSpace software section and follow the link to download the latest version of MySQL installer to your desktop.
9. Select “Custom” setup type and select “Next” to proceed with the installation.

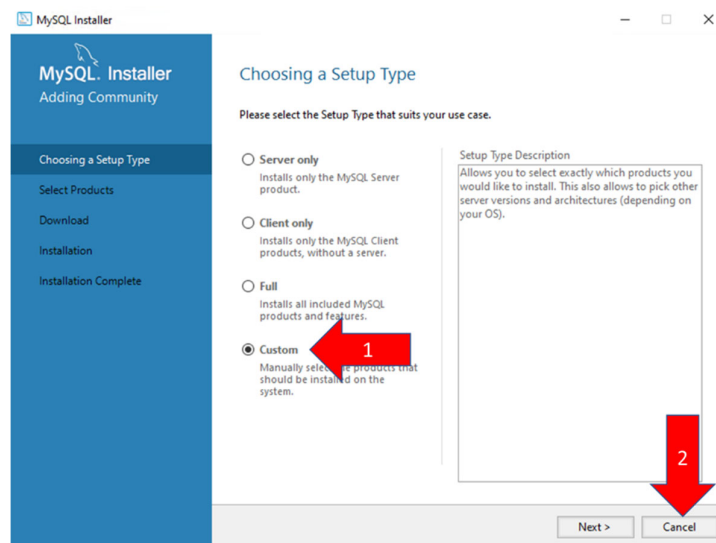


Figure 1

10. Expand the products section (Pointer 1) and choose the products listed in Pointer 3. Use the right arrow (Pointer 2) to select the products. Select “Next” after selection are made.

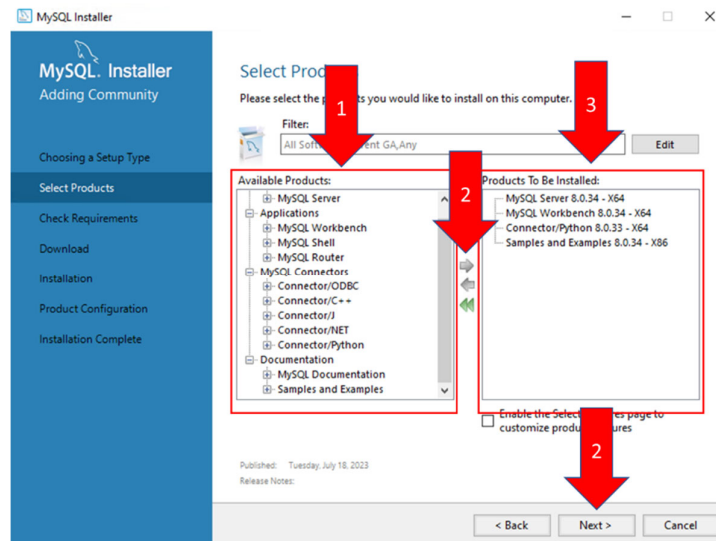


Figure 2

11. Select “Next” to continue.

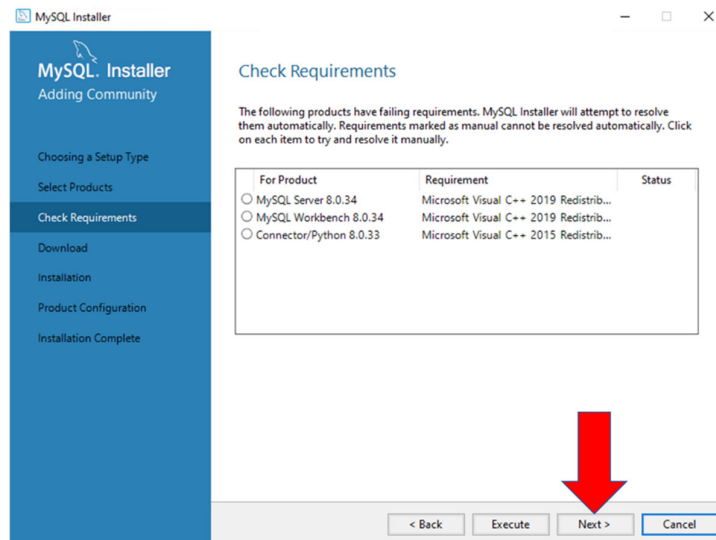


Figure 3

12. Select “Execute” to download the Python Connector. Click “Next” after download to continue. (Figure 4).

Select “Execute” to continue with installation. Select “Next” after installation is successful (Figure 5).

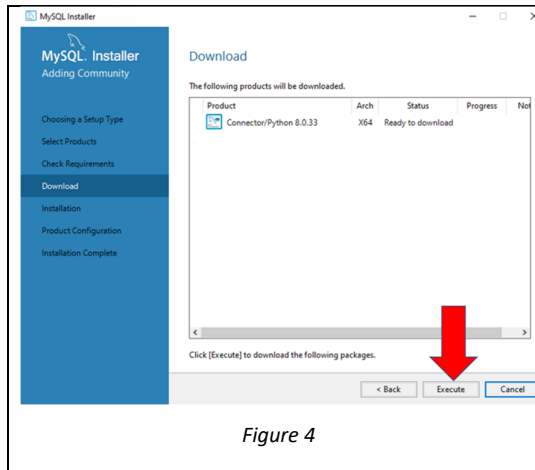


Figure 4

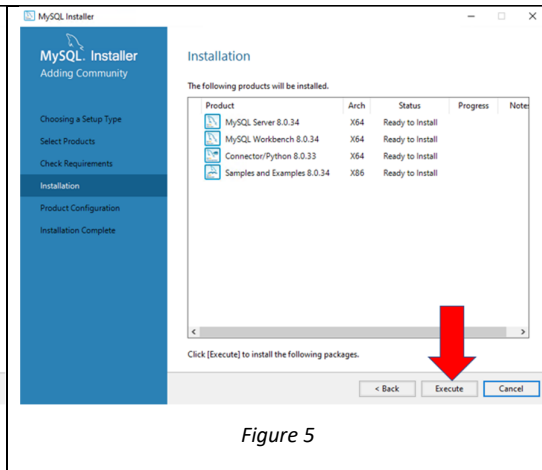


Figure 5

13. Select “Next” to start product configuration (Figure 6).

Select “Next” to keep the default configuration values (Figure 7).

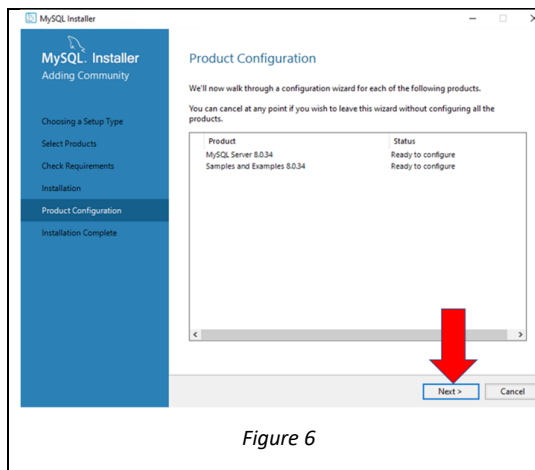


Figure 6

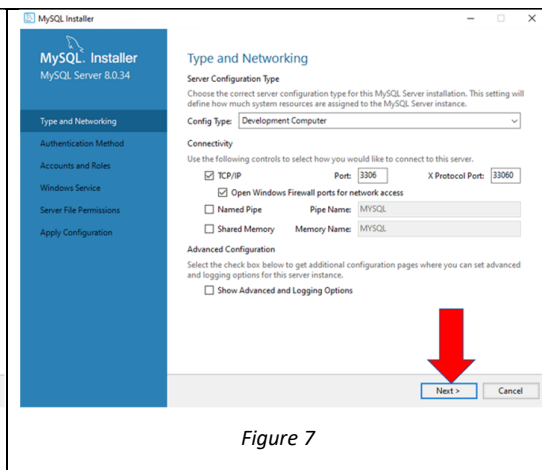


Figure 7

14. Select “Use Legacy Authentication Method” for Authentication Method and select “Next” to continue.

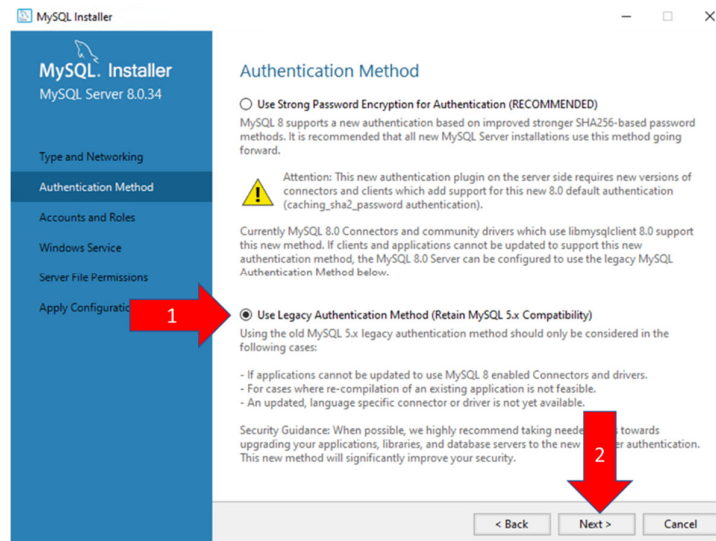


Figure 8

15. Enter the root password as: **!password** and repeat the password and select “Next” to continue. (Note: We are using a weak password for standardisation in practice you should use a stronger password)

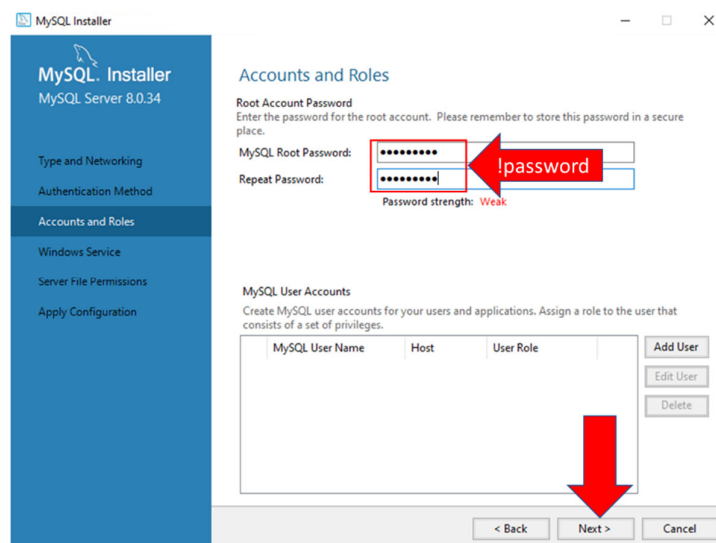
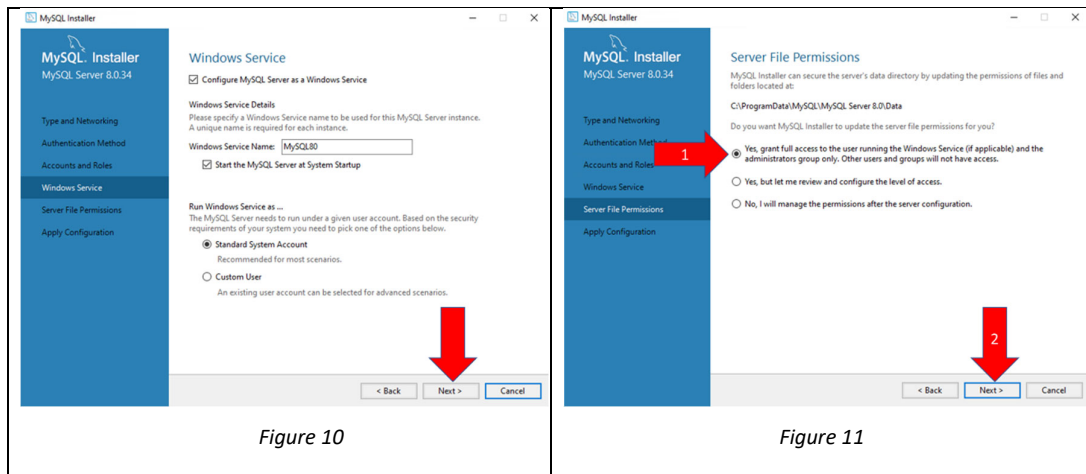


Figure 9

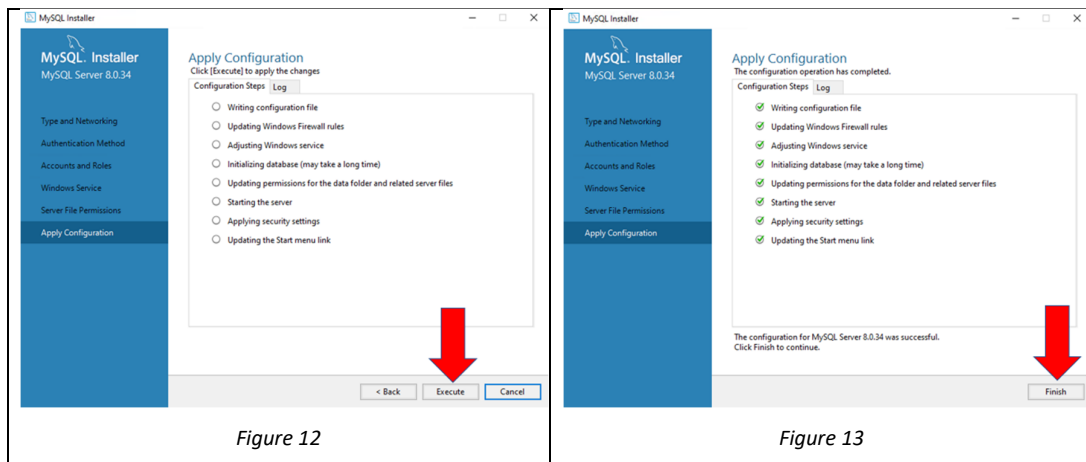
16. Select “Next” to keep the default configuration values (Figure 10).

Select “Grant Full Access” (Pointer 1) and “Next” to continue (Figure 11).



17. Select “Execute” to continue. (Figure 12).

Select “Finish” to complete the server configuration (Figure 13).



18. Select “Next” to continue.

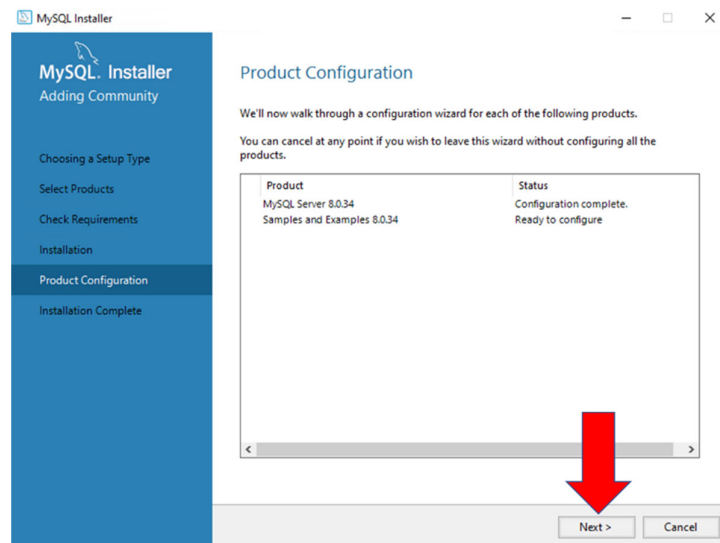


Figure 14

19. Enter **!password** as the password (Pointer 1), select “Check” (Pointer 2) ensure status is successful (Pointer 3). Select “Next” to continue

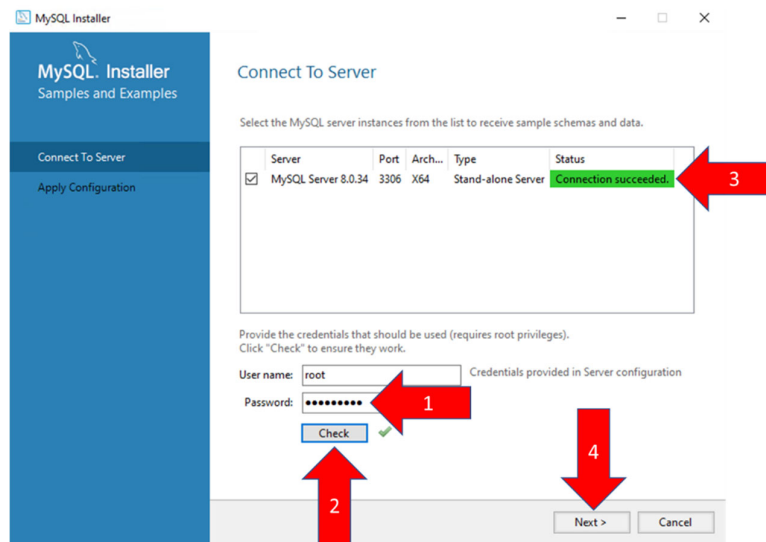
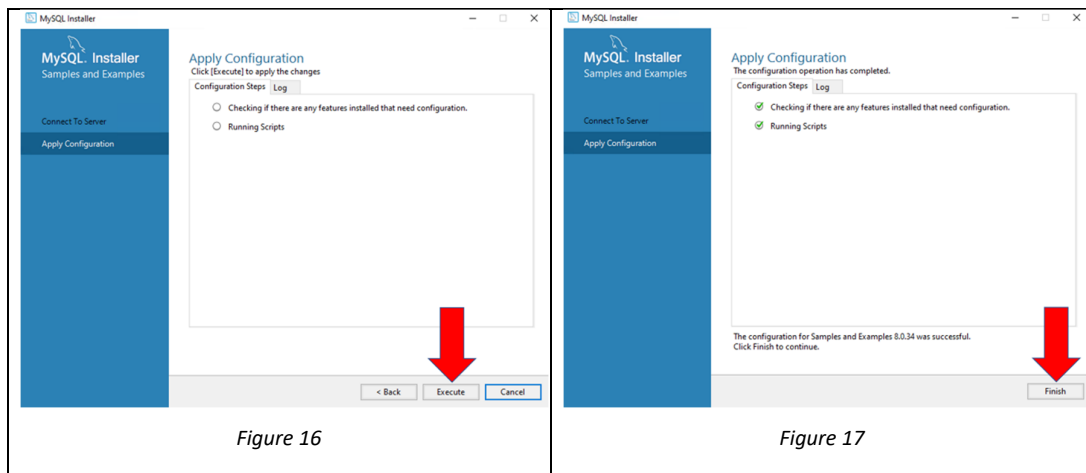


Figure 15

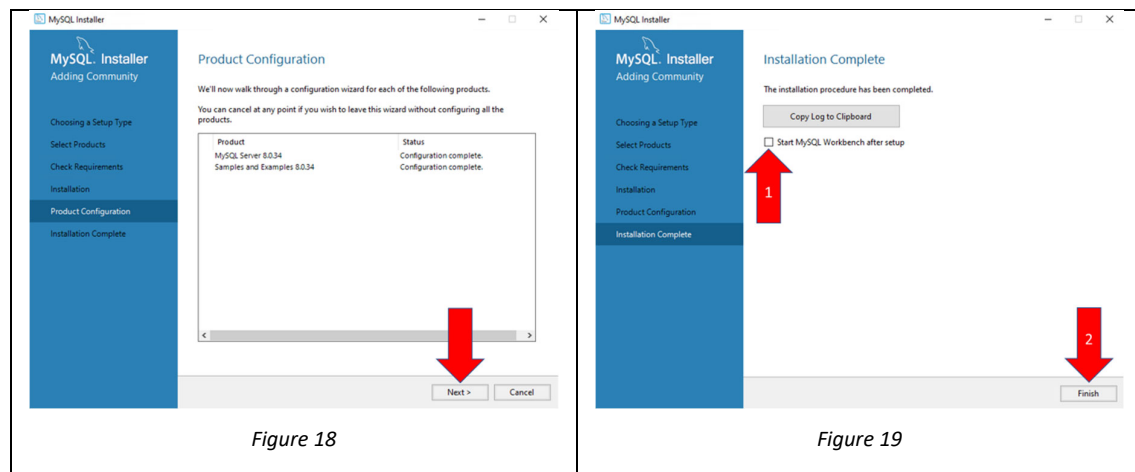
20. Select “Execute” to continue (Figure 16).

Select “Finish” to continue (Figure 17).



21. Select “Next” to continue (Figure 18).

Unselect “Start MySQL Workbench after setup” (Pointer 1). Select “Finish” to complete the installation. (Figure 19).



Exercise 2: Exploring Navigator (Administration Tab)

1. Start MySQL Workbench app by selecting the windows start button (Pointer 1) and typing in “workbench” and select the app (Pointer 2).

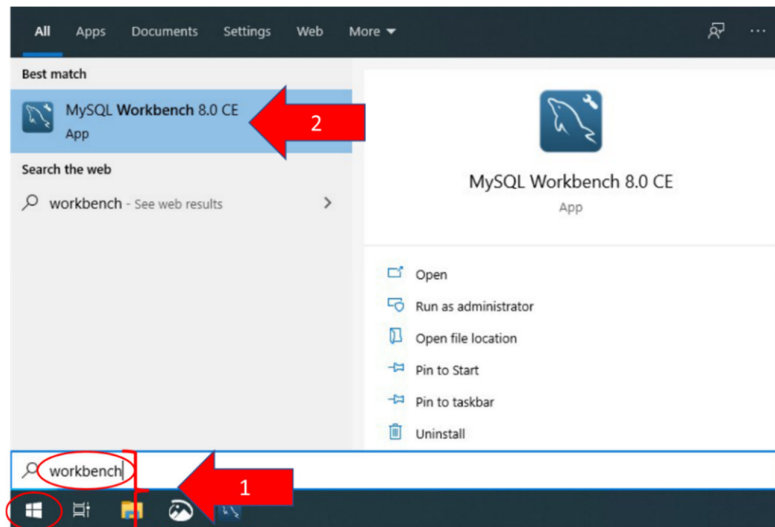


Figure 20

2. Select the configure button on the home screen tab.

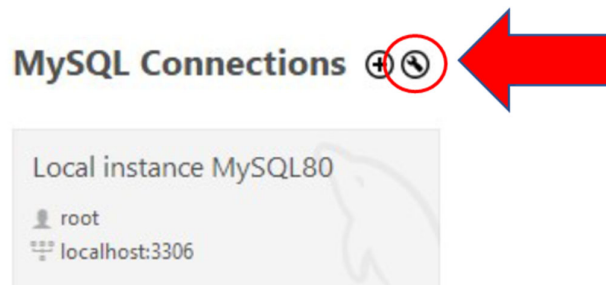


Figure 21

Task:

- a) Search and write down the “Hostname” and “Port” number listed in the Parameters tab.

- b) Explain what is the purpose of having the hostname and port number?
(Hint: <https://dev.mysql.com/doc/workbench/en/wb-mysql-connections-methods-standard.html>).

3. Click on the local instance tab to connect to the database.

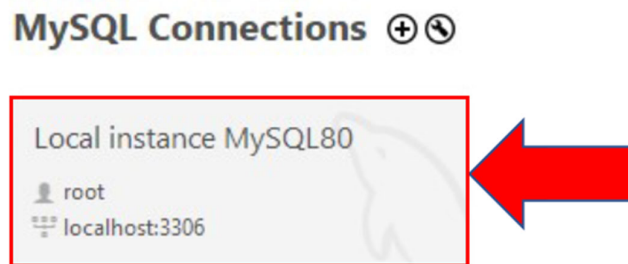


Figure 22

4. Select the “Schema” tab from navigator panel.

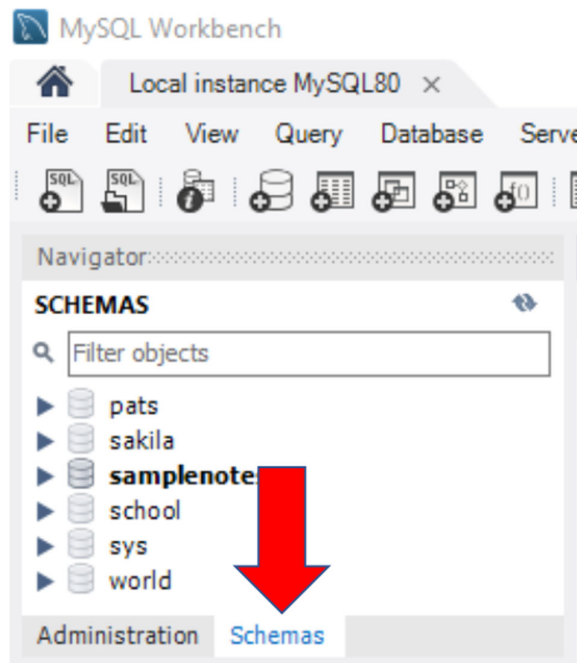


Figure 23

Task:

- a) Write down the schemas that are listed in the panel.

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