

Hands-on Lab: Joins in MySQL using phpMyAdmin

Estimated time needed: 20 minutes

In this lab, you will learn how to create tables and load data in the MySQL database service using the phpMyAdmin graphical user interface (GUI) tool.

Software Used in this Lab

In this lab, you will use MySQL. MySQL is a Relational Database Management System (RDBMS) designed to efficiently store, manipulate, and retrieve data.



To complete this lab you will utilize MySQL relational database service available as part of IBM Skills Network Labs (SN Labs) Cloud IDE. SN Labs is a virtual lab environment used in this course.

Objectives

After completing this lab, you will be able to:

- 1. Determine the correct type of join to use for a given problem.
- 2. Write and execute joins to query data from multiple tables.

Database Used in this Lab

Mysql learners database has been used in this lab.

Here you will be creating and inserting data into the below mentioned 3 tables

1.chicagopublicschools 2.chicagosocioeconomicdata 3.chicago crime

Here you will be using 3 dump files for this purpose.

chicagopublicschools

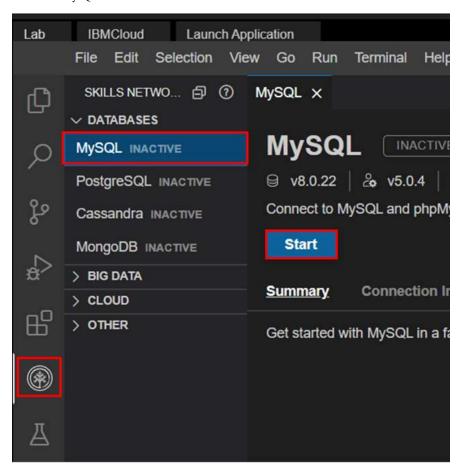
chicago crime

chicagosocioeconomicdata

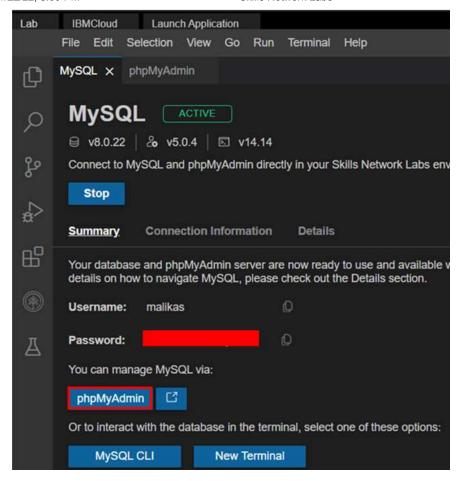
Task A: Create a database

1. Click on Skills Network Toolbox. In Database section, click MySQL.

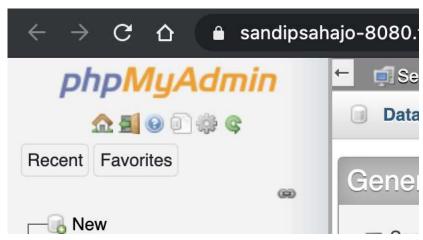
To start the MySQL click Start.

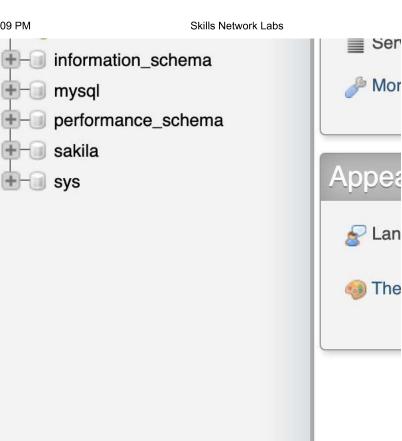


Once MySQL has started, click on phpMyAdmin button to open phpMyAdmin in the same window.



3. You will see the phpMyAdmin GUI tool.





 In the tree-view, click New to create a new empty database. Then enter Mysql_Learners as the name of the database and click Create.

The encoding will be left as **utf8mb4_0900_ai_ci**. UTF-8 is the most commonly used character encoding for content or data.

Proceed to Task B.



Load the dump files one by one into the database **Mysql_learners** by clicking the **Import** tab and choose the file. Click on **Go** button.





The tables are created and the data is loaded successfully. Repeat the same operation with the other 2 dump files to create and load the tables.

You will see a screen as below



Exercise

Problem 1

List the case number, type of crime and community area for all crimes in community area number 18.

- ► Hint 1
- ► Hint 2
- ► Hint 3

Problem 2

List all crimes that took place at a school. Include case number, crime type and community name.

- ► Hint 1
- ▶ Hint 2
- ▶ Hint 3

Problem 3

For the communities of Oakland, Armour Square, Edgewater and CHICAGO list the associated community area numbers and the case_numbers.

► Hint 1

- ▶ Hint 2
- ► Hint 3

Congratulations! You have completed this lab, and you are ready for the next topic.

Author(s)

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Changelog

Date	Version	Changed by	Change Description
2022-05-11	0.3	Appalabhaktula Hema	Updated hint
2022-04-07	0.2	Malika Singla	Updated screenshot
2022-02-10	0.1	Lakshmi Holla, Malika Singla	Initial Version

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