# **MySQL Bootcamp**

Explore, modify, and export data from databases in MySQL. Learn foundational concepts like tables, data types, and queries, and advanced techniques like join statements, subqueries, and stored procedures.

Group classes in NYC and onsite training is available for this course. For more information, email <a href="mailto:contact@nyimtraining.com">contact@nyimtraining.com</a> or visit: <a href="https://training-nyc.com/courses/mysql-bootcamp">https://training-nyc.com/courses/mysql-bootcamp</a>



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## **Course Outline**

# Introduction to MySQL

What is a database and why do we need SQL?

Top 5 problems in Excel and why using SQL solves this problem

Should we import from Excel and why? How it is done?

Create a link to Excel spreadsheet with MySQL?

### **Tables & Queries**

#### **How to Create Tables 101**

- · SQL Data Types
- · Primary Keys
- · Null values and Not Null Values
- Auto Increment

#### **How to Create a Basic Query**

- · Use the Where clause
- · Conditional statements
- Multiple conditions
- Comparison Operators
- Logic Values
- Null Values
- Patterns also known as Wildcard characters
- Compare Column Values

#### **Advanced Queries**

Distinct Values

- Top Values
- Date Functions
- Date Calculations
- · Aggregate Functions
- String Functions
- Sort Data
- Rank Data

Save a Query

Execute a Query

Modify a Saved Query

# **Data Wrangling**

Group Data

Filtering Grouped Data

Summarize Group Data

Pivot and Unpivot Operators

# **Data Analytics**

#### **Joins**

- Inner Join
- Left Join
- Full Outer Join
- Self-Join
- Unions
- Except and Intersect

Presenting and Making Sense of Query Results

Saving the Query Results and Exporting

Generating Reports

### **Tables & Queries**

Importing and Exporting Data

Update Data

#### Queries

- Distinct Values
- Top Values
- Subqueries with "In"
- Inline Views

### **Views**

Create a Simple View With Check Option

### **Locks and Transactions**

Exclusive Table Locks
Shared Table Locks
Using Variables
Setting Variables with Selects
Select/Update Example
Simple Transactions

# **MySQL Functions**

String to Date and Date Format Control Flow Functions Casting Functions

## **Stored Procedures**

Introduction to Stored Procedures
Changing the Delimiter
Editing a Stored Procedure
Variable Scope
A Data Generating Procedure

# **Triggers**

Introduction to Triggers
Validating Triggers
Triggers and Transactions

### **User Defined Functions**

Functions vs Procedures User-Defined Functions