# LEARN SG using MySQL in one day and LEARN IT WELL

The only book you need to start coding in SQL immediately

SQL for Beginners with Hands-on Project

# LEARN CODING FAST

**JAMIE CHAN** 

## Learn SQL (using MySQL) in One Day and Learn It Well

# SQL for Beginners with Hands-on Project The only book you need to start coding in SQL immediately

#### **By Jamie Chan**

http://www.learncodingfast.com/sql

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#### **Preface**

This book is written to help you learn SQL programming FAST and learn it WELL. We'll be using MySQL in the book, which is a free database management system that is widely used.

If you are an absolute beginner to SQL, you'll find that this book explains complex concepts in an easy to understand and concise manner. If you are an experienced coder, you'll appreciate that this book covers a wide range of topics.

Topics covered include basic concepts like table creation and data manipulation, to more advanced concepts like triggers, cursors, stored routines and more. These topics are carefully selected to give you a broad exposure to SQL, while not overwhelming you with information overload. In addition, as Richard Branson puts it: "The best way of learning about anything is by doing". Throughout the book, we'll be building a database together. This hands-on approach to learning will help you gain a deeper understanding of the language. At the end of the course, you'll also be guided through a new project that gives you a chance to put what you've learned to use.

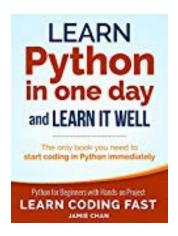
You can download the source code for the examples and project at <a href="http://www.learncodingfast.com/sql">http://www.learncodingfast.com/sql</a>

Any errata can be found at <a href="http://www.learncodingfast.com/errata">http://www.learncodingfast.com/errata</a>

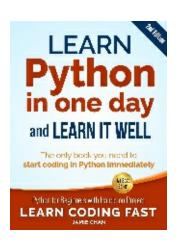
#### **Contact Information**

I would love to hear from you. For feedback or queries, you can contact me at <a href="mailto:jamie@learncodingfast.com">jamie@learncodingfast.com</a>.

#### **More Books by Jamie**

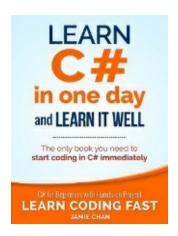


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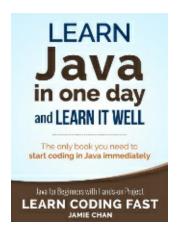




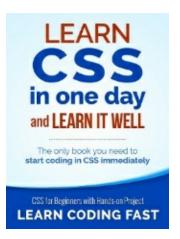
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#### **Chapter 1: Introduction**

Welcome to SQL and thank you so much for picking up my book. I sincerely hope that this book can help you master SQL fast and introduce you to the exciting world of databases.

This book adopts a hands-on approach to learning. As we progress from one chapter to another, we'll be doing various exercises. You are strongly encouraged to follow along these exercises.

At the end of the book, we'll also be working on a new project together. This project involves building a SQL database for a sports complex. We'll learn to build the database, insert data, perform queries, write routines, views, cursors, and more.

Excited and ready to start embarking on our SQL learning journey? Let's do it!

#### What is SQL?

Simply stated, SQL stands for <u>Structured Query Language</u> and is a language used to manage data stored in a relational database.

This brings us to the next question - What is a database?

A database is a collection of data organized in some format so that the data can be easily accessed, managed and updated. The predominant type of database is a relational database. Relational databases organize data in the form of tables. In addition, they contain queries, views and other elements to help us interact with the data.

In order to manage our database, we need to use a software application known as a database management system (DBMS).

Clear?

So far, we have the following terminologies:

- 1) SQL is a language
- 2) A database is a structured collection of data
- 3) A DBMS is a software that we use to manage our databases

With regards to DBMS, there are a large number of them available. Some are free to download and use while others are not. The most commonly used DBMS include MySQL, Oracle, Microsoft SQL Server and IBM DB2.

Each of these DBMS have their own versions of SQL. While this may sound intimidating, rest assured that all DBMS support the major SQL commands (such as SELECT, UPDATE, DELETE, INSERT) in a similar manner. Hence, if you know one version of SQL, it is very easy to pick up other versions.

In this book, we'll be using MySQL. This is one of the most popular DBMS available. Best of all, it's free! From this point forward, whenever I mention SQL, I'm referring to the MySQL version.

#### **Getting Ready to Code**

In order to start using MySQL, we need to first download and install two applications: MySQL Server and My SQL Workbench.

#### Installing MySQL applications

#### **Windows**

For Windows users, go to <a href="https://dev.mysql.com/downloads/windows/installer/">https://dev.mysql.com/downloads/windows/installer/</a>.

Scroll down and click on the first "Download" button to download the application. You'll be directed to another page. Scroll to the bottom of the page and click on "No thanks, just start my download."

Once you have downloaded the program, double-click on the file and follow the instructions to install the software.

When prompted to choose a setup type, select "Custom" and click "Next".

