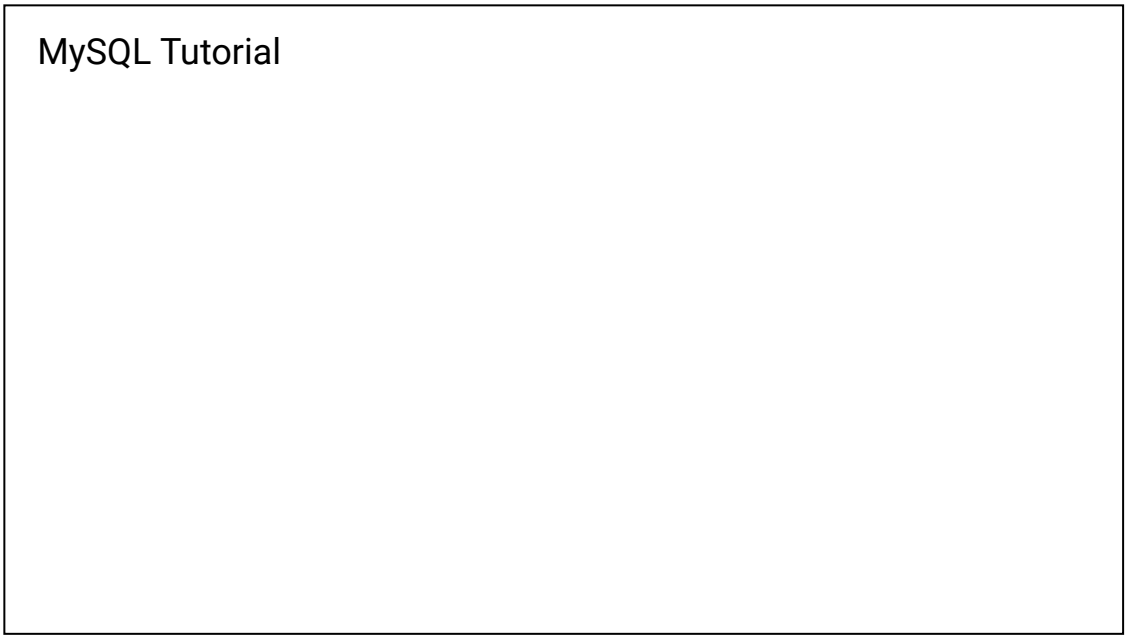
NEW THINK TANK

MySQL Video Tutorial

Posted by Derek Banas on Aug 29, 2014 in How to Code PHP | 29 comments

Welcome to my MySQL video tutorial. I'll cover 95 – 98% of everything you'll ever need to know in one video.

I cover creating / destroying databases, creating / destroying tables, data types, NULL, DEFAULT, ENUM, AUTO_INCREMENT, primary keys, foreign keys, atomic data, normalized, DESCRIBE, INSERT, ALTER, SELECT, SHOW, RENAME, WHERE, logical operators, comparison operators, ORDER BY, GROUP BY, LIMIT, string operators, joins, LIKE, DISTINCT, math functions and more.



I have other videos like this in which I teach HTML, CSS, JavaScript, PHP, Object Oriented PHP and Java in one video if you're interested.

If you like videos like this, it helps to tell others with a click here

Cheat Sheet / Transcript from the Video

```
1. Login to MySQL

    a. mysql5 -u mysqladmin -p

2. quit

    a. Quit MySQL

3. show databases;

    a. Display all databases

4. CREATE DATABASE test2;

    a. Create a database

5. USE test2;

    a. Make test2 the active database

6. SELECT DATABASE();

    a. Show the currently selected database

7. DROP DATABASE IF EXISTS test2;

    a. Delete the named database

    b. Slide about building tables (2)

8. CREATE TABLE student(
first_name VARCHAR(30) NOT NULL,
last_name VARCHAR(30) NOT NULL,
email VARCHAR(60) NULL,
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```
street VARCHAR(50) NOT NULL,
city VARCHAR(40) NOT NULL,
state CHAR(2) NOT NULL DEFAULT "PA",
zip MEDIUMINT UNSIGNED NOT NULL,
phone VARCHAR(20) NOT NULL,
birth_date DATE NOT NULL,
sex ENUM('M', 'F') NOT NULL,
date_entered TIMESTAMP,
lunch_cost FLOAT NULL,
student_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY
);

a. VARCHAR(30) : Characters with an expected max length of 30

b. NOT NULL : Must contain a value

c. NULL : Doesn't require a value

d. CHAR(2) : Contains exactly 2 characters

e. DEFAULT "PA" : Receives a default value of PA

f. MEDIUMINT : Value no greater then 8,388,608

g. UNSIGNED : Can't contain a negative value

h. DATE : Stores a date in the format YYYY-MM-DD

i. ENUM('M', 'F') : Can contain either a M or F

j. TIMESTAMP : Stores date and time in this format YYYY-MM-DD-HH-MM-SS

k. FLOAT: A number with decimal spaces, with a value no bigger than
1.1E38 or smaller than -1.1E38

l. INT : Contains a number without decimals

m. AUTO_INCREMENT : Generates a number automatically that is one greater
then the previous row

n. PRIMARY KEY (SLIDE): Unique ID that is assigned to this row of data

    I. Uniquely identifies a row or record

    II. Each Primary Key must be unique to the row

    III. Must be given a value when the row is created and that value
canâ��t be NULL

    IV. The original value canâ��t be changed It should be short

    V. Itâ��s probably best to auto increment the value of the key

o. Atomic Data & Table Templating

As your database increases in size, you are going to want everything to
be organized, so that it can perform your queries quickly. If your
tables are set up properly, your database will be able to crank through
hundreds of thousands of bits of data in seconds.

How do you know how to best set up your tables though? Just follow some
```

simple rules:

Every table should focus on describing just one thing. Ex. Customer Table would have name, age, location, contact information. It shouldnâ��t contain lists of anything such as interests, job history, past address, products purchased, etc.

After you decide what one thing your table will describe, then decide what things you need to describe that thing. Refer to the customer example given in the last step.

Write out all the ways to describe the thing and if any of those things requires multiple inputs, pull them out and create a new table for them. For example, a list of past employers.

Once your table values have been broken down, we refer to these values as being atomic. Be careful not to break them down to a point in which the data is harder to work with. It might make sense to create a different variable for the house number, street name, apartment number, etc.; but by doing so you may make your self more work? That decision is up to you?

p. Some additional rules to help you make your data atomic: Donâ��t have multiple columns with the same sort of information. Ex. If you wanted to include a employment history you should create job1, job2, job3 columns. Make a new table with that data instead.

Donâ��t include multiple values in one cell. Ex. You shouldnâ��t create a cell named jobs and then give it the value: McDonalds, Radio Shack, Walmart,â¦ Normalized Tables

q. What does normalized mean?

Normalized just means that the database is organized in a way that is considered standardized by professional SQL programmers. So if someone new needs to work with the tables theyâ��ll be able to understand how to easily.

Another benefit to normalizing your tables is that your queries will run much quicker and the chance your database will be corrupted will go down.

r. What are the rules for creating normalized tables:

The tables and variables defined in them must be atomic Each row must have a Primary Key defined. Like your social security number identifies you, the Primary Key will identify your row.

You also want to eliminate using the same values repeatedly in your columns. Ex. You wouldnâ��t want a column named instructors, in which you hand typed in their names each time. You instead, should create an instructor table and link to itâ��s key.

Every variable in a table should directly relate to the primary key. Ex. You should create tables for all of your customers potential states, cities and zip codes, instead of including them in the main customer table. Then you would link them using foreign keys. Note: Many people think this last rule is overkill and can be ignored!

No two columns should have a relationship in which when one changes another must also change in the same table. This is called a Dependency. Note: This is another rule that is sometimes ignored.

```
117
118 ------------ Numeric Types ------------
119
120 TINYINT: A number with a value no bigger than 127 or smaller than -128
121 SMALLINT: A number with a value no bigger than 32,768 or smaller than
    -32,767
122 MEDIUM INT: A number with a value no bigger than 8,388,608 or smaller
    than -8,388,608
123 INT: A number with a value no bigger than 2^31 or smaller than 2^31
    â�� 1
124 BIGINT: A number with a value no bigger than 2^63 or smaller than 2^63
    â�� 1
125 FLOAT: A number with decimal spaces, with a value no bigger than 1.1E38
    or smaller than -1.1E38
126 DOUBLE: A number with decimal spaces, with a value no bigger than
    1.7E308 or smaller than -1.7E308
127
128 ------------ String Types ------------
129
130 CHAR: A character string with a fixed length
131 VARCHAR: A character string with a length thatâ��s variable
132 BLOB: Can contain 2^16 bytes of data
133 ENUM: A character string that has a limited number of total values,
    which you must define.
134 SET: A list of legal possible character strings. Unlike ENUM, a SET can
    contain multiple values in comparison to the one legal value with ENUM.
135
136 ------------ Date & Time Types ------------
137
138 DATE: A date value with the format of (YYYY-MM-DD)
139 TIME: A time value with the format of (HH:MM:SS)
140 DATETIME: A time value with the format of (YYYY-MM-DD HH:MM:SS)
141 TIMESTAMP: A time value with the format of (YYYYMMDDHHMMSS)
142 YEAR: A year value with the format of (YYYY)
143
144 9. DESCRIBE student;
145
146     a. Show the table set up
147
148 10. INSERT INTO student VALUES('Dale', 'Cooper', 'dcooper@aol.com',
149     '123 Main St', 'Yakima', 'WA', 98901, '792-223-8901', "1959-2-22",
150     'M', NOW(), 3.50, NULL);
151
152     a. Inserting Data into a Table
153
154     b. INSERT INTO student VALUES('Harry', 'Truman', 'htruman@aol.com',
155     '202 South St', 'Vancouver', 'WA', 98660, '792-223-9810', "1946-1-
    24",
156     'M', NOW(), 3.50, NULL);
157
158     INSERT INTO student VALUES('Shelly', 'Johnson', 'sjohnson@aol.com',
159     '9 Pond Rd', 'Sparks', 'NV', 89431, '792-223-6734', "1970-12-12",
160     'F', NOW(), 3.50, NULL);
161
162     INSERT INTO student VALUES('Bobby', 'Briggs', 'bbriggs@aol.com',
163     '14 12th St', 'San Diego', 'CA', 92101, '792-223-6178', "1967-5-24",
164     'M', NOW(), 3.50, NULL);
165
166     INSERT INTO student VALUES('Donna', 'Hayward', 'dhayward@aol.com',
167     '120 16th St', 'Davenport', 'IA', 52801, '792-223-2001', "1970-3-
    24",
```

```
    'F', NOW(), 3.50, NULL);

    INSERT INTO student VALUES('Audrey', 'Horne', 'ahorne@aol.com',
    '342 19th St', 'Detroit', 'MI', 48222, '792-223-2001', "1965-2-1",
    'F', NOW(), 3.50, NULL);

    INSERT INTO student VALUES('James', 'Hurley', 'jhurley@aol.com',
    '2578 Cliff St', 'Queens', 'NY', 11427, '792-223-1890', "1967-1-2",
    'M', NOW(), 3.50, NULL);

    INSERT INTO student VALUES('Lucy', 'Moran', 'lmoran@aol.com',
    '178 Dover St', 'Hollywood', 'CA', 90078, '792-223-9678', "1954-11-
27",
    'F', NOW(), 3.50, NULL);

    INSERT INTO student VALUES('Tommy', 'Hill', 'thill@aol.com',
    '672 High Plains', 'Tucson', 'AZ', 85701, '792-223-1115', "1951-12-
21",
    'M', NOW(), 3.50, NULL);

    INSERT INTO student VALUES('Andy', 'Brennan', 'abrennan@aol.com',
    '281 4th St', 'Jacksonville', 'NC', 28540, '792-223-8902', "1960-12-
27",
    'M', NOW(), 3.50, NULL);

11. SELECT * FROM student;

    a. Shows all the student data

12. CREATE TABLE class(
    name VARCHAR(30) NOT NULL,
    class_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY);

    a. Create a separate table for all classes

13. show tables;

    a. Show all the tables

14. INSERT INTO class VALUES
('English', NULL), ('Speech', NULL), ('Literature', NULL),
('Algebra', NULL), ('Geometry', NULL), ('Trigonometry', NULL),
('Calculus', NULL), ('Earth Science', NULL), ('Biology', NULL),
('Chemistry', NULL), ('Physics', NULL), ('History', NULL),
('Art', NULL), ('Gym', NULL);

    a. Insert all possible classes

    b. select * from class;

15. CREATE TABLE test(
    date DATE NOT NULL,
    type ENUM('T', 'Q') NOT NULL,
    class_id INT UNSIGNED NOT NULL,
    test_id INT UNSIGNED NOT NULL AUTO_INCREMENT PRIMARY KEY);

    a. class_id is a foreign key

    I. Used to make references to the Primary Key of another table

    II. Example: If we have a customer and city table. If the city table
```

had a column which listed the unique primary key of all the customers, that Primary Key listing in the city table would be considered a Foreign Key.

III. The Foreign Key can have a different name from the Primary Key name.

IV. The value of a Foreign Key can have the value of NULL.

V. A Foreign Key doesnâ��t have to be unique

16. CREATE TABLE score(
student_id INT UNSIGNED NOT NULL,
event_id INT UNSIGNED NOT NULL,
score INT NOT NULL,
PRIMARY KEY(event_id, student_id));

a. We combined the event and student id to make sure we don't have duplicate scores and it makes it easier to change scores

b. Since neither the event or the student ids are unique on their own we are able to make them unique by combining them

17. CREATE TABLE absence(
student_id INT UNSIGNED NOT NULL,
date DATE NOT NULL,
PRIMARY KEY(student_id, date));

a. Again we combine 2 items that aren't unique to generate a unique key

18. Add a max score column to test

a. ALTER TABLE test ADD maxscore INT NOT NULL AFTER type;

b. DESCRIBE test;

19. Insert Tests

a. INSERT INTO test VALUES
('2014-8-25', 'Q', 15, 1, NULL),
('2014-8-27', 'Q', 15, 1, NULL),
('2014-8-29', 'T', 30, 1, NULL),
('2014-8-29', 'T', 30, 2, NULL),
('2014-8-27', 'Q', 15, 4, NULL),
('2014-8-29', 'T', 30, 4, NULL);

b. select * FROM test;

20. ALTER TABLE score CHANGE event_id test_id
INT UNSIGNED NOT NULL;

a. Change the name of event_id in score to test_id

b. DESCRIBE score;

21. Enter student scores

a. INSERT INTO score VALUES
(1, 1, 15),

```
    (1, 2, 14),
    (1, 3, 28),
    (1, 4, 29),
    (1, 5, 15),
    (1, 6, 27),
    (2, 1, 15),
    (2, 2, 14),
    (2, 3, 26),
    (2, 4, 28),
    (2, 5, 14),
    (2, 6, 26),
    (3, 1, 14),
    (3, 2, 14),
    (3, 3, 26),
    (3, 4, 26),
    (3, 5, 13),
    (3, 6, 26),
    (4, 1, 15),
    (4, 2, 14),
    (4, 3, 27),
    (4, 4, 27),
    (4, 5, 15),
    (4, 6, 27),
    (5, 1, 14),
    (5, 2, 13),
    (5, 3, 26),
    (5, 4, 27),
    (5, 5, 13),
    (5, 6, 27),
    (6, 1, 13),
    (6, 2, 13),
    # Missed this day (6, 3, 24),
    (6, 4, 26),
    (6, 5, 13),
    (6, 6, 26),
    (7, 1, 13),
    (7, 2, 13),
    (7, 3, 25),
    (7, 4, 27),
    (7, 5, 13),
    # Missed this day (7, 6, 27),
    (8, 1, 14),
    # Missed this day (8, 2, 13),
    (8, 3, 26),
    (8, 4, 23),
    (8, 5, 12),
    (8, 6, 24),
    (9, 1, 15),
    (9, 2, 13),
    (9, 3, 28),
    (9, 4, 27),
    (9, 5, 14),
    (9, 6, 27),
    (10, 1, 15),
    (10, 2, 13),
    (10, 3, 26),
    (10, 4, 27),
    (10, 5, 12),
    (10, 6, 22);

22. Fill in the absences
```

```
344
345     a. INSERT INTO absence VALUES
346     (6, '2014-08-29'),
347     (7, '2014-08-29'),
348     (8, '2014-08-27');
349
350 23. SELECT * FROM student;
351
352     a. Shows everything in the student table
353
354 24. SELECT FIRST_NAME, last_name
355     FROM student;
356
357     a. Show just selected data from the table (Not Case Sensitive)
358
359 25. RENAME TABLE
360     absence to absences,
361     class to classes,
362     score to scores,
363     student to students,
364     test to tests;
365
366     a. Change all the table names SHOW TABLES;
367
368 26. SELECT first_name, last_name, state
369     FROM students
370     WHERE state="WA";
371
372     a. Show every student born in the state of Washington
373
374 27. SELECT first_name, last_name, birth_date
375     FROM students
376     WHERE YEAR(birth_date) >= 1965;
377
378     a. You can compare values with =, >, <, >=, <=, !=
379
380     b. To get the month, day or year of a date use MONTH(), DAY(), or
    YEAR()
381
382 27. SELECT first_name, last_name, birth_date
383     FROM students
384     WHERE MONTH(birth_date) = 2 OR state="CA";
385
386     a. AND, && : Returns a true value if both conditions are true
387
388     b. OR, || : Returns a true value if either condition is true
389
390     c. NOT, ! : Returns a true value if the operand is false
391
392 28. SELECT last_name, state, birth_date
393     FROM students
394     WHERE DAY(birth_date) >= 12 && (state="CA" || state="NV");
395
396     a. You can use compound logical operators
397
398 29. SELECT last_name
399     FROM students
400     WHERE last_name IS NULL;
401
402     SELECT last_name
403     FROM students
```

```
    WHERE last_name IS NOT NULL;

    a. If you want to check for NULL you must use IS NULL or IS NOT NULL

30. SELECT first_name, last_name
    FROM students
    ORDER BY last_name;

    a. ORDER BY allows you to order results. To change the order use
    ORDER BY col_name DESC;

31. SELECT first_name, last_name, state
    FROM students
    ORDER BY state DESC, last_name ASC;

    a. If you use 2 ORDER BYs it will order one and then the other

32. SELECT first_name, last_name
    FROM students
    LIMIT 5;

    a. Use LIMIT to limit the number of results

33. SELECT first_name, last_name
    FROM students
    LIMIT 5, 10;

    a. You can also get results 5 through 10

34. SELECT CONCAT(first_name, " ", last_name) AS 'Name',
    CONCAT(city, ", ", state) AS 'Hometown'
    FROM students;

    a. CONCAT is used to combine results

    b. AS provides for a way to define the column name

35. SELECT last_name, first_name
    FROM students
    WHERE first_name LIKE 'D%' OR last_name LIKE '%n';

    a. Matchs any first name that starts with a D, or ends with a n

    b. % matchs any sequence of characters

36. SELECT last_name, first_name
    FROM students
    WHERE first_name LIKE '___y';

    a. _ matchs any single character

37. SELECT DISTINCT state
    FROM students
    ORDER BY state;

    a. Returns the states from which students are born because DISTINCT
    eliminates duplicates in results

38. SELECT COUNT(DISTINCT state)
    FROM students;
```

```
    a. COUNT returns the number of matchs, so we can get the number
    of DISTINCT states from which students were born

39. SELECT COUNT(*)
    FROM students;

    SELECT COUNT(*)
    FROM students
    WHERE sex='M';

    a. COUNT returns the total number of records as well as the total
    number of boys

40. SELECT sex, COUNT(*)
    FROM students
    GROUP BY sex;

    a. GROUP BY defines how the results will be grouped

41. SELECT MONTH(birth_date) AS 'Month', COUNT(*)
    FROM students
    GROUP BY Month
    ORDER BY Month;

    a. We can get each month in which we have a birthday and the total
    number for each month

42. SELECT state, COUNT(state) AS 'Amount'
    FROM students
    GROUP BY state
    HAVING Amount > 1;

    a. HAVING allows you to narrow the results after the query is
executed

43. SELECT
    test_id AS 'Test',
    MIN(score) AS min,
    MAX(score) AS max,
    MAX(score)-MIN(score) AS 'range',
    SUM(score) AS total,
    AVG(score) AS average
    FROM scores
    GROUP BY test_id;

    a. There are many math functions built into MySQL. Range had to be
quoted because it is a reserved word.

    b. You can find all reserved words here
http://dev.mysql.com/doc/mysqld-version-reference/en/mysqld-version-
reference-reservedwords-5-5.html

44. The Built in Numeric Functions (SLIDE)

ABS(x) : Absolute Number: Returns the absolute value of the variable x.

ACOS(x), ASIN(x), ATAN(x), ATAN2(x,y), COS(x), COT(x), SIN(x), TAN(x)
:Trigonometric Functions : They are used to relate the angles of a
triangle to the lengths of the sides of a triangle.

AVG(column_name) : Average of Column : Returns the average of all values
```

```
in a column. SELECT AVG(column_name) FROM table_name;

CEILING(x) : Returns the smallest number not less than x.

COUNT(column_name) : Count : Returns the number of non null values in the column. SELECT COUNT(column_name) FROM table_name;

DEGREES(x) : Returns the value of x, converted from radians to degrees.

EXP(x) : Returns e^x

FLOOR(x) : Returns the largest number not grater than x

LOG(x) : Returns the natural logarithm of x

LOG10(x) : Returns the logarithm of x to the base 10

MAX(column_name) : Maximum Value : Returns the maximum value in the column. SELECT MAX(column_name) FROM table_name;

MIN(column_name) : Minimum : Returns the minimum value in the column. SELECT MIN(column_name) FROM table_name;

MOD(x, y) : Modulus : Returns the remainder of a division between x and y

PI() : Returns the value of PI

POWER(x, y) : Returns x ^ Y

RADIANS(x) : Returns the value of x, converted from degrees to radians

RAND() : Random Number : Returns a random number between the values of 0.0 and 1.0

ROUND(x, d) : Returns the value of x, rounded to d decimal places

SQRT(x) : Square Root : Returns the square root of x

STD(column_name) : Standard Deviation : Returns the Standard Deviation of values in the column. SELECT STD(column_name) FROM table_name;

SUM(column_name) : Summation : Returns the sum of values in the column. SELECT SUM(column_name) FROM table_name;

TRUNCATE(x) : Returns the value of x, truncated to d decimal places

45. SELECT * FROM absences;

    DESCRIBE scores;

    SELECT student_id, test_id
    FROM scores
    WHERE student_id = 6;

    INSERT INTO scores VALUES
    (6, 3, 24);

    DELETE FROM absences
    WHERE student_id = 6;

```

```
    a. Look up students that missed a test

    b. Look up the specific test missed by student 6

    c. Insert the make up test result

    d. Delete the record in absences

46. ALTER TABLE absences
    ADD COLUMN test_taken CHAR(1) NOT NULL DEFAULT 'F'
    AFTER student_id;

    a. Use ALTER to add a column to a table. You can use AFTER
    or BEFORE to define the placement

47. ALTER TABLE absences
    MODIFY COLUMN test_taken ENUM('T','F') NOT NULL DEFAULT 'F';

    a. You can change the data type with ALTER and MODIFY COLUMN

48. ALTER TABLE absences
    DROP COLUMN test_taken;

    a. ALTER and DROP COLUMN can delete a column

49. ALTER TABLE absences
    CHANGE student_id student_id INT UNSIGNED NOT NULL;

    a. You can change the data type with ALTER and CHANGE

50. SELECT *
    FROM scores
    WHERE student_id = 4;

    UPDATE scores SET score=25
    WHERE student_id=4 AND test_id=3;

    a. Use UPDATE to change a value in a row

51. SELECT first_name, last_name, birth_date
    FROM students
    WHERE birth_date
    BETWEEN '1960-1-1' AND '1970-1-1';

    a. Use BETWEEN to find matches between a minimum and maximum

52. SELECT first_name, last_name
    FROM students
    WHERE first_name IN ('Bobby', 'Lucy', 'Andy');

    a. Use IN to narrow results based on a predefined list of options

53. SELECT student_id, date, score, maxscore
    FROM tests, scores
    WHERE date = '2014-08-25'
    AND tests.test_id = scores.test_id;

    a. To combine data from multiple tables you can perform a JOIN
    by matching up common data like we did here with the test ids

    b. You have to define the 2 tables to join after FROM
```

```
634
635     c. You have to define the common data between the tables after WHERE
636
637 54. SELECT scores.student_id, tests.date, scores.score, tests.maxscore
638     FROM tests, scores
639     WHERE date = '2014-08-25'
640     AND tests.test_id = scores.test_id;
641
642     a. It is good to qualify the specific data needed by proceeding
643     it with the tables name and a period
644
645     b. The test_id that is in scores is an example of a foreign key,
    which
646     is a reference to a primary key in the tests table
647
648 55. SELECT CONCAT(students.first_name, " ", students.last_name) AS Name,
649     tests.date, scores.score, tests.maxscore
650     FROM tests, scores, students
651     WHERE date = '2014-08-25'
652     AND tests.test_id = scores.test_id
653     AND scores.student_id = students.student_id;
654
655     a. You can JOIN more then 2 tables as long as you define the like
656     data between those tables
657
658 56. SELECT students.student_id,
659     CONCAT(students.first_name, " ", students.last_name) AS Name,
660     COUNT(absences.date) AS Absences
661     FROM students, absences
662     WHERE students.student_id = absences.student_id
663     GROUP BY students.student_id;
664
665     a. If we wanted a list of the number of absences per student we
666     have to group by student_id or we would get just one result
667
668 57. SELECT students.student_id,
669     CONCAT(students.first_name, " ", students.last_name) AS Name,
670     COUNT(absences.date) AS Absences
671     FROM students LEFT JOIN absences
672     ON students.student_id = absences.student_id
673     GROUP BY students.student_id;
674
675     a. If we need to include all information from the table listed
676     first "FROM students", even if it doesn't exist in the table on
677     the right "LEFT JOIN absences", we can use a LEFT JOIN.
678
679 58. SELECT students.first_name,
680     students.last_name,
681     scores.test_id,
682     scores.score
683     FROM students
684     INNER JOIN scores
685     ON students.student_id=scores.student_id
686     WHERE scores.score <= 15
687     ORDER BY scores.test_id;
688
689     a. An INNER JOIN gets all rows of data from both tables if there
690     is a match between columns in both tables
691
692     b. Here I'm getting all the data for all quizzes and matching that
693     data up based on student ids
```

```
694
695 59. One-to-One Relationship (SLIDE)
696
697     a. In this One-to-One relationship there can only be one social
    security number per person. Hence,  each social security number can be
    associated with one person. As well, one person in the other table only
    matches up with one social security number.
698
699     b. One-to-One relationships can be identified also in that the
    foreign keys never duplicate across all rows.
700
701     c. If you are confused by the One-to-One relationship it is
    understandable, because they are not often used. Most of the time if a
    value never repeats it should remain in the parent table being customer
    in this case. Just understand that in a One-to-One relationship, exactly
    one row in a parent table is related to exactly one row of a child
    table.
702
703 60. One-to-Many Relationship
704
705     a. When we are talking about One-to-Many relationships think about
    the table diagram here. If you had a list of customers chances are some
    of them would live in the same state. Hence, in the state column in the
    parent table, it would be common to see a duplication of states. In this
    example, each customer can only live in one state so their would only be
    one id used for each customer.
706
707     b. Just remember that, a One-to-Many relationship is one in which a
    record in the parent table can have many matching records in the child
    table, but a record in the child can only match one record in the
    parent. A customer can choose to live in any state, but they can only
    live in one at a time.
708
709 61. Many-to-Many Relationship
710
711     a. Many people can own many different products. In this example, you
    can see an example of a Many-to-Many relationship. This is a sign of a
    non-normalized database, by the way. How could you ever access this
    information:
712
713     b. If a customer buys more than one product, you will have multiple
    product idâ��s associated with each customer. As well, you would have
    multiple customer idâ��s associated with each product.
```

29 Responses to “MySQL Video Tutorial”

1.  *Tayirjan* says:
   August 29, 2014 at 10:18 pm

   Could you please put your videos on http://www.youku.com or http://www.tudou.com? Because we can’t reach youtube in China. That would be really helpful not only for me but also other learners in China.

   Reply

   -  *Derek Banas* says:

August 31, 2014 at 11:19 am

I'll try to upload to those sites again. For some reason some of my videos were taken down when I tried about a year and a half ago.

Reply

2. *Lucas* says:
September 1, 2014 at 12:38 pm

Thanks for the tutorial. It's very informative and concise.

Reply

- *Derek Banas* says:
September 1, 2014 at 1:02 pm

Thank you 🙂

Reply

  - *Lucas* says:
September 1, 2014 at 1:29 pm

Are you going to cover transactions, triggers, functions and similar operations on databases? Can I request this?

Reply

    - *Derek Banas* says:
September 1, 2014 at 5:57 pm

I'll cover using PHP with MySQL next. I'll then make a tutorial on how to build a web service. I'll see if I can fit other topics in based on requests

Reply

      - *Lucas* says:
September 2, 2014 at 1:55 pm

Please consider making a tutorial on transactions, triggers etc. It would be great if you could cover this! It might be a good idea to use MS SQL Server and MySql (both) to show the differences in syntax (are there many?). 🙂 Thank you for all your effort 😀

Reply

        - *Derek Banas* says:
September 2, 2014 at 6:05 pm

I covered them a bit with SQLite. I can definitely cover them with MySQL. I don't have access to SQL Server though sorry

Reply

- *Lucas* says:
  September 3, 2014 at 1:22 pm

  MySQL will be ok. Thank you 🙂

  Reply

  - *Derek Banas* says:
    September 5, 2014 at 8:00 am

    You're very welcome 🙂

    Reply

3. *Siddharth* says:
   October 2, 2014 at 11:46 pm

   You're just pure awesome. But sometimes its overwhelming 😀 how do you know so much stuffff???! 😀 god knows how much time it will take me to learn all of this stuff

   Reply

   - *Derek Banas* says:
     October 3, 2014 at 9:23 am

     Just take your time. I'm not that smart so I'm sure you can learn everything

     Reply

4. *UTKARSH SAGAR SRIVASTAVA* says:
   October 7, 2014 at 4:03 am

   please help me an error generate generate on MYSql 5.6 Command Line Client

   mysql> CREATE TABLE student(
   ->first_name VARCHAR(30) NOT NULL);
   ERROR 1046(3D000): No database selected

   Reply

   - *Derek Banas* says:
     October 7, 2014 at 5:33 am

     You need to first define your database. So if your database is named studentinfo, first type use studentinfo; in mysql

Reply

5.  *UTKARSH SAGAR SRIVASTAVA* says:
October 9, 2014 at 4:15 am

ya got it thanks a lot..

Reply

6.  *Fuffy* says:
October 10, 2014 at 6:22 am

Hi!!!
What about doing a guide over noSQL database??

Reply

-  *Derek Banas* says:
October 10, 2014 at 11:39 am

I plan on covering those when I start my Java enterprise tutorial

Reply

-  *Fuffy* says:
October 11, 2014 at 2:49 am

Thank you a lot!!!

Reply

-  *Derek Banas* says:
October 11, 2014 at 5:38 am

You're very welcome 🙂

Reply

7.  *Peter* says:
October 15, 2014 at 2:41 am

Thanks for the great video Derek. A great asset for beginners and very well explained.

Reply

-  *Derek Banas* says:
October 16, 2014 at 5:49 pm

You're very welcome 🙂 Thank you

Reply

8. *lucy* says:
October 27, 2014 at 8:34 pm

Thank you!

Reply

   -  *Derek Banas* says:
   October 29, 2014 at 7:57 am

   You're very welcome 🙂

   Reply

9. *dhars* says:
October 27, 2014 at 10:31 pm

Hi Derek:

Could you make a video for triggers, views, and transactions? It would be great help! Thanks for your other videos, very informative!

Reply

   -  *Derek Banas* says:
   October 29, 2014 at 7:57 am

   I'll do that asap

   Reply

10. *daniel* says:
October 31, 2014 at 3:35 am

what else i need to know about sql? thank you!

Reply

   -  *Derek Banas* says:
   October 31, 2014 at 5:13 pm

   This is a vast majority of it. There are more complex topics and you'll also have to learn how to properly use joins to get at the data in exactly the way you want. I may make another video to cover the rest

   Reply

11.  *Gopi* says:
[January 4, 2015 at 11:51 am]

Great Tutorial Darek! I am a big fan of yours!

Reply

-  *Derek Banas* says:
[January 5, 2015 at 1:36 pm]

Thank you 🙂

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