

Stack Overflow is a community of 4.7 million programmers, just like you, helping each other.

Join them; it only takes a minute:

Sign up

Join the Stack Overflow community to:

Ask programming questions

Answer and help your peers

Get recognized for your expertise

How to list the tables in an SQLite database file that was opened with ATTACH?



What SQL can be used to list the tables, and the rows within those tables in a SQLite database file - once I have attached it with the `ATTACH` command on the SQLite 3 command line tool?

[sql](#) [database](#) [sqlite](#)

edited Nov 22 '15 at 21:55



Ciro Santilli 六四事件 法轮功 包卓轩

35.9k 7 160 128

asked Sep 17 '08 at 12:59



izb
17.8k 27 83 144

1 try this one you got full info of tables <http://www.sqlite.org/pragmas.html#schema> – [Piyush](#) Sep 9 '11 at 7:39

1 The following is a useful GUI for sqlite if you are interested: [sqlitestudio.pl](#) Gives you access to view the details of the databases, tables, very quickly and has a nice query editor too... – [VenomFangs](#) Apr 17 '13 at 15:40

8 `.tables` for tables and `.schema ?TABLE?` for the schema of the specific table. – [High6](#) Jun 16 '13 at 15:52

`.table 'bank_%'` or `.table '%_empl'` also valid syntax for quering prefixes/suffixes! – [gavenkoa](#) Feb 20 '15 at 0:23

15 Answers

The `.tables`, and `.schema` "helper" functions don't look into ATTACHED databases: they just query the `SQLITE_MASTER` table for the "main" database. Consequently, if you used

```
ATTACH some_file.db AS my_db;
```

then you need to do

```
SELECT name FROM my_db.sqlite_master WHERE type='table';
```

Note that temporary tables don't show up with `.tables` either: you have to list `sqlite_temp_master` for that:

```
SELECT name FROM sqlite_temp_master WHERE type='table';
```

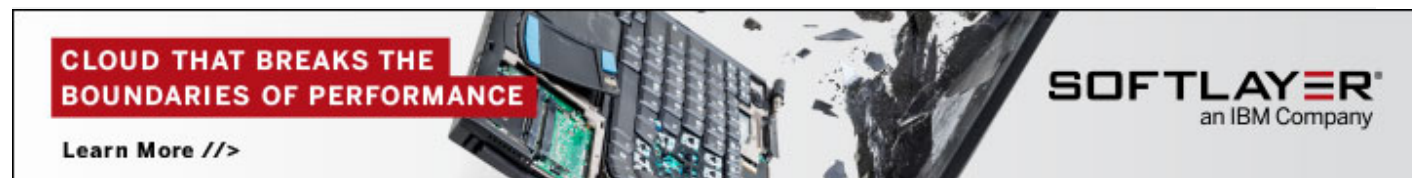
answered Sep 17 '08 at 13:30



[Anthony Williams](#)

38.1k 5 83 123

8 Only "SELECT name FROM sqlite_master WHERE type='table'" works for me – [vladkras](#) Dec 15 '15 at 13:28



There are a few steps to see the tables in an SQLite database:

1. List the tables in your database:

```
.tables
```

2. List how the table looks:

```
.schema tablename
```

3. Print the entire table:

```
SELECT * FROM tablename;
```

4. List all of the available SQLite prompt commands:

```
.help
```

edited Apr 16 '14 at 15:05



Tuan Dang

2,082 3 15 39

answered Sep 17 '08 at 13:02



Mark Janssen

9,529 2 8 4

45 FYI: for a list of all the commands understood, try ".help" at your sqlite3 prompt. – FilmJ Oct 19 '09 at 23:51

1 I think the first command should be ".table" instead of ".tables" – phongvcao Aug 12 '11 at 12:36

10 @phngcv in sqlite3 the right command is .tables – develCuy May 27 '12 at 3:25

25 .table and .tables are both allowed. For that matter, .ta would work as well, since sqlite3 will accept any command that is unambiguous. The name of the command according to the help is indeed ".tables" (if anyone is still paying attention). – dbw Feb 6 '13 at 1:26

18 (This should be the accepted answer, it is the most sqlite-y way to do things). – dbw Feb 6 '13 at 1:27

It appears you need to go through the **sqlite_master** table, like this:

```
SELECT * FROM dbname.sqlite_master WHERE type='table';
```

And then manually go through each table with a `SELECT` or similar to look at the rows.

The `.DUMP` and `.SCHEMA` commands doesn't appear to see the database at all.

edited Jun 12 '14 at 8:52



[ann](#)

611 1 7 16

answered Sep 17 '08 at 13:01



[Lasse V. Karlsen](#)

206k 60 407 606

-
- 111 Not something easy to read or remember for use in the future; the builtin `.tables` command is more intuitive – [user649198](#) Feb 23 '13 at 22:02
-
- 18 @Gryllida: despite this is usable from any SQL-API as it's valide SQL. Built-in commands may not be supported everywhere. – [Valentin Heinitz](#) Apr 8 '13 at 8:36
-
- 8 The answer by Mark Jessen should be marked as correct, it is much more informative. – [Rubber Duck](#) May 27 '13 at 22:21
-
- 1 I agree with @RubberDuck -- Mark Janssen's answer below about `.tables` is more accurate/correct – [Doktor J](#) Nov 26 '13 at 17:59
-
- 3 Doh! Reading comprehension fail... I somehow managed to not catch the ATTACH reference... twice >_< – [Doktor J](#) Nov 27 '13 at 16:49
-

To show all tables, use

```
SELECT name FROM sqlite_master WHERE type = "table"
```

To show all rows, I guess you can iterate through all tables and just do a `SELECT *` on each one. But maybe a `DUMP` is what you're after?

answered Sep 17 '08 at 13:06



[Christian Davén](#)

6,522 4 35 58

-
- 6 Thanks for the only answer that really addressed the question... "What SQL", not what command can be used... thanks! – [Brad Parks](#) Jan 18 '14 at 1:37
-

Also, this prints one table name per line, while `.tables` prints multiple columns of table names (annoying/not useful). – [Shane](#) Mar 21 '14 at 19:14

Use `.help` to check for available commands.

`.table`

This command would show all tables under your current database.

edited Jun 12 '14 at 8:38



ann

611 1 7 16

answered Aug 31 '11 at 4:13



Antony.H

661 7 8

2 Yours was answered before the one with 345+ upvotes. You were there first. Have an upvote. – [a coder](#) Oct 15 '13 at 15:59

Strange, it must be correct, but doesn't work when i use it – [Jürgen K.](#) Jan 14 at 15:54

There is a command available for this on the sqlite command line.

`.tables ?PATTERN?` List names **of** tables matching a **LIKE** pattern

Which converts to the following SQL

```
SELECT name FROM sqlite_master
WHERE type IN ('table','view') AND name NOT LIKE 'sqlite_%'
UNION ALL
SELECT name FROM sqlite_temp_master
WHERE type IN ('table','view')
ORDER BY 1
```

answered Sep 17 '08 at 13:06

flubba

To list the tables you can also do:

```
SELECT name FROM sqlite_master
WHERE type='table';
```

edited Mar 13 '13 at 9:19

answered Sep 17 '08 at 13:04



eugene y

50.4k 11 107 191



Rafał Dowgird

21.8k 8 51 78

Try `PRAGMA table_info(table-name);`

<http://www.sqlite.org/pragma.html#schema>

edited Mar 13 '13 at 9:16

answered Jun 7 '10 at 2:53



eugene y

50.4k 11 107 191



Luiz Geron

766 7 18

1 This is probably the best way to do it. – [Alix Axel](#) Jan 31 '13 at 10:42

6 This only works if you know the name of the table. You can't use this to get the list of table names. – [Eric W](#)
Apr 18 '13 at 14:06

According to the [documentation](#), the equivalent of MySQLs' `SHOW TABLES;` is:

The ".tables" command is similar to setting list mode then executing the following query:

```
SELECT name FROM sqlite_master
  WHERE type IN ('table','view') AND name NOT LIKE 'sqlite_%'
UNION ALL
SELECT name FROM sqlite_temp_master
  WHERE type IN ('table','view')
ORDER BY 1;
```

However, if you are checking if a single table exists (or to get its details), see [@LuizGeron](#) answer.

answered Jan 31 '13 at 10:47



Alix Axel

83k 52 281 399

The easiest way to do this is to open the database directly and use the `.dump` command, rather than attaching it after invoking the SQLite 3 shell tool.

So... (assume your OS command line prompt is `$`) instead of `$sqlite3` :

```
sqlite3> ATTACH database.sqlite as "attached"
```

From your OS command line, open the database directly:

```
$sqlite3 database.sqlite
sqlite3> .dump
```

edited Nov 18 '15 at 19:02



Peter Mortensen

9,544 11 67 98

answered Jan 30 '09 at 6:19



Noah

9,319 7 74 134

I use this query to get

```
SELECT name FROM sqlite_master WHERE type='table'
```

and to use in iOS

```
NSString *aStrQuery=[NSString stringWithFormat:@"SELECT name FROM sqlite_master WHERE
type='table'"];
```

answered Aug 1 '15 at 15:13



GameLoading

4,712 2 22 53

Use:

```
import sqlite3
```

```
TABLE_LIST_QUERY = "SELECT * FROM sqlite_master where type='table'"
```

edited Nov 18 '15 at 19:06

answered Oct 13 '15 at 8:07

**Peter Mortensen****9,544** 11 67 98**Mrityunjay****334** 1 6

As of the latest versions of SQLite 3 you can issue:

```
.fullschema
```

to see all of your create statements.

edited Nov 18 '15 at 19:03

**Peter Mortensen****9,544** 11 67 98

answered Sep 8 '14 at 23:59

**pepper****613** 1 10 21

SQLite version 3.7.13 2012-07-17 17:46:21 Enter ".help" for instructions Enter SQL statements terminated with a ";" sqlite> .fullschema Error: unknown command or invalid arguments: "fullschema". Enter ".help" for help – [Mona Jalal](#) Oct 14 '14 at 19:06

You are using a version from 2012 – [pepper](#) Oct 14 '14 at 19:08

The ".schema" commando will list available tables and their rows, by showing you the statement used to create said tables:

```
sqlite> create table_a (id int, a int, b int);
sqlite> .schema table_a
CREATE TABLE table_a (id int, a int, b int);
```

answered Sep 17 '08 at 13:05

trf

Since nobody has mentioned about the official reference of SQLite, I think it may be useful to refer to it under this heading:

<https://www.sqlite.org/cli.html>

You can manipulate your database using the commands described in this link. Besides, **if you are using Windows OS** and do not know where the command shell is, that is in the SQLite's site:

<https://www.sqlite.org/download.html>

After downloading it, **click `sqlite3.exe` file to initialize the SQLite command shell**. When it is initialized, by default this SQLite session is using an in-memory database, not a file on disk, and so all changes will be lost when the session exits. To use a persistent disk file as the database, enter the `".open ex1.db"` command immediately after the terminal window starts up.

The example above causes the database file named `"ex1.db"` to be opened and used, and created if it does not previously exist. You might want to use a full pathname to ensure that the file is in the directory that you think it is in. Use forward-slashes as the directory separator character. In other words use `"c:/work/ex1.db"`, not `"c:\work\ex1.db"`.

To see all tables in the database you have previously chosen, type the command `.tables` as it is said in the above link.

If you work in Windows, I think it might be useful to move this `sqlite.exe` file to same folder with the other Python files. In this way, the Python file writes to and the SQLite shell reads from `.db` files are in the same path.

edited Jan 23 at 23:54

answered Apr 2 '15 at 21:24



oiyio

508 1 7 20

protected by Community ♦ Sep 17 '11 at 23:31

Thank you for your interest in this question. Because it has attracted low-quality or spam answers that had to be removed, posting an answer now requires 10 [reputation](#) on this site.

Would you like to answer one of these [unanswered questions](#) instead?