

SQLITE - SELECT QUERY

http://www.tutorialspoint.com/sqlite/sqlite_select_query.htm

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SQLite **SELECT** statement is used to fetch the data from a SQLite database table which returns data in the form of result table. These result tables are also called result-sets.

Syntax:

The basic syntax of SQLite SELECT statement is as follows:

```
SELECT column1, column2, columnN FROM table_name;
```

Here, column1, column2...are the fields of a table, whose values you want to fetch. If you want to fetch all the fields available in the field then you can use following syntax:

```
SELECT * FROM table_name;
```

Example:

Consider COMPANY table is having the following records:

ID	NAME	AGE	ADDRESS	SALARY
1	Paul	32	California	20000.0
2	Allen	25	Texas	15000.0
3	Teddy	23	Norway	20000.0
4	Mark	25	Rich-Mond	65000.0
5	David	27	Texas	85000.0
6	Kim	22	South-Hall	45000.0
7	James	24	Houston	10000.0

Following is an example to fetch and display all these records using SELECT statement. Here, first three commands have been used to set properly formatted output.

```
sqlite>.header on
sqlite>.mode column
sqlite> SELECT * FROM COMPANY;
```

Finally, you will get the following result:

ID	NAME	AGE	ADDRESS	SALARY
1	Paul	32	California	20000.0
2	Allen	25	Texas	15000.0
3	Teddy	23	Norway	20000.0
4	Mark	25	Rich-Mond	65000.0
5	David	27	Texas	85000.0
6	Kim	22	South-Hall	45000.0
7	James	24	Houston	10000.0

If you want to fetch only selected fields of COMPANY table, then use the following query:

```
sqlite> SELECT ID, NAME, SALARY FROM COMPANY;
```

Above query will produce the following result:

ID	NAME	SALARY
1	Paul	20000.0
2	Allen	15000.0
3	Teddy	20000.0

```

4      Mark      65000.0
5      David     85000.0
6      Kim       45000.0
7      James     10000.0

```

Setting output column width:

Sometimes, you will face a problem related to truncated output in case of **.mode column** which happens because of default width of the column to be displayed. What you can do is that you can set column displayable column width using **.width num, num....** command as follows:

```

sqlite>.width 10, 20, 10
sqlite>SELECT * FROM COMPANY;

```

Above **.width** command sets first column width to 10, second column width to 20 and third column width to 10. So finally above SELECT statement will give the following result:

ID	NAME	AGE	ADDRESS	SALARY
1	Paul	32	California	20000.0
2	Allen	25	Texas	15000.0
3	Teddy	23	Norway	20000.0
4	Mark	25	Rich-Mond	65000.0
5	David	27	Texas	85000.0
6	Kim	22	South-Hall	45000.0
7	James	24	Houston	10000.0

Schema Information:

Because all the **dot commads** are available at SQLite prompt only, so while doing your programming with SQLite, you will use the following statement to list down all the tables created in your database using the following SELECT statement with **sqlite_master** table:

```

sqlite> SELECT tbl_name FROM sqlite_master WHERE type = 'table';

```

Assuming you have only COMPANY table in your testDB.db, this will produce the following result:

```

tbl_name
-----
COMPANY

```

You can list down complete information about COMPANY table as follows:

```

sqlite> SELECT sql FROM sqlite_master WHERE type = 'table' AND tbl_name = 'COMPANY';

```

Assuming you have only COMPANY table in your testDB.db, this will produce the following result:

```

CREATE TABLE COMPANY(
  ID INT PRIMARY KEY     NOT NULL,
  NAME           TEXT     NOT NULL,
  AGE            INT      NOT NULL,
  ADDRESS        CHAR(50),
  SALARY         REAL
)
```