**Perform simple SQL queries against a database.**

**Prerequisites**

First, you need to [install a MariaDB database](https://www.certdepot.net/rhel7-install-mariadbmysql/).  
Then, you have to [create a simple database schema](https://www.certdepot.net/rhel7-create-simple-database-schema/).

**Initial Connection**

Now, you need to connect to your database (here called **test**):

# **mysql -u user -p test**

Enter password:

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Welcome to the MariaDB monitor. Commands end with ; or \g.

Your MariaDB connection id is 18

Server version: 5.5.35-MariaDB MariaDB Server

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [test]>

You can check the presence of the table, previously created, called **addresses**:

MariaDB [test]> **desc addresses;**

+---------+------------------+------+-----+---------+-------+

| Field   | Type             | Null | Key | Default | Extra |

+---------+------------------+------+-----+---------+-------+

| id      | int(10) unsigned | YES  |     | NULL    |       |

| name    | varchar(20)      | YES  |     | NULL    |       |

| address | varchar(40)      | YES  |     | NULL    |       |

+---------+------------------+------+-----+---------+-------+

3 rows in set (0.00 sec)

**Data Insertion**

You can insert some data into the table called **addresses**:

MariaDB [test]> **insert addresses values(1,"James","address1");**

Query OK, 1 row affected (0.02 sec)

MariaDB [test]> **insert addresses values(2,"Bill","address2");**

Query OK, 1 row affected (0.02 sec)

**Data Selection**

Now, you can get **James**‘ address:

MariaDB [test]> **select address from addresses where name="James";**

+----------+

| address |

+----------+

| address1 |

+----------+

1 row in set (0.00 sec)

You can also get all the records ordered by name in an ascending order (**ASC** is the default order and can be omitted):

MariaDB [test]> **select \* from addresses order by name ASC;**

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| id   | name  | address  |

+------+-------+----------+

|    2 | Bill  | address2 |

|    1 | James | address1 |

+------+-------+----------+

2 rows in set (0.00 sec)

**Data Update**

You can replace the name “**Bill**” with “**John**“:

MariaDB [test]> **update addresses set name="John" where name="Bill";**

Query OK, 1 row affected (0.02 sec)

Rows matched: 1 Changed: 1 Warnings: 0

MariaDB [test]> **select \* from addresses order by name DESC;**

+------+-------+----------+

| id   | name  | address  |

+------+-------+----------+

|    2 | John  | address2 |

|    1 | James | address1 |

+------+-------+----------+

2 rows in set (0.00 sec)

Note: **DESC** specifies a descending order.

**Data Removal**

You can also delete **James**‘ record:

MariaDB [test]> **delete from addresses where name="James";**

Query OK, 1 row affected (0.02 sec)

MariaDB [test]> **select \* from addresses;**

+------+------+----------+

| id   | name | address  |

+------+------+----------+

|    2 | John | address2 |

+------+------+----------+

1 row in set (0.00 sec)

This is a very basic tutorial. A lot of other operations are available for a database software like **MariaDB**. A complete documentation can be found on the [MySQL website](http://dev.mysql.com/doc/).