

## Creating a Table

For you to be able to create a table, you must have selected a database. The table can be created using the CREATE TABLE statement. Here is the syntax for the command:

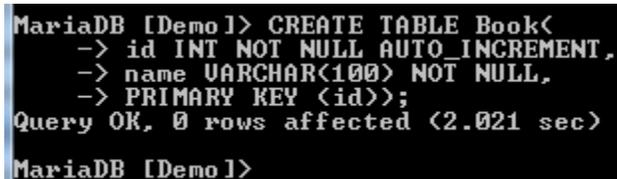
```
CREATE TABLE tableName (columnName columnType);
```

You can set one of the columns to be the primary key. This column should not allow null values.

We will create two tables within the Demo database, Book, and Price tables. Each table will have two columns.

Let's begin by creating the Book table with two columns, id and name. Run the following command:

```
CREATE TABLE Book(  
id INT NOT NULL AUTO_INCREMENT,  
name VARCHAR(100) NOT NULL,  
PRIMARY KEY (id));
```



```
MariaDB [Demo]> CREATE TABLE Book(  
-> id INT NOT NULL AUTO_INCREMENT,  
-> name VARCHAR(100) NOT NULL,  
-> PRIMARY KEY (id));  
Query OK, 0 rows affected (2.021 sec)  
MariaDB [Demo]>
```

The PRIMARY KEY constraint has been used to set the id column as the primary key for the table. The AUTO\_INCREMENT property will increment the values of the id column by 1 automatically for each new record inserted into the table. All the columns will not allow null values.

Now, create the second table, the Price table:

```
CREATE TABLE Price(  
id INT NOT NULL AUTO_INCREMENT,  
price float NOT NULL,
```

```
PRIMARY KEY (id));
```

```
MariaDB [Demo] > CREATE TABLE Price(  
-> id INT NOT NULL AUTO_INCREMENT,  
-> price float NOT NULL,  
-> PRIMARY KEY (id));  
Query OK, 0 rows affected (0.357 sec)  
MariaDB [Demo] >
```

The id column has been set as the primary key for the table.

## Showing Tables

Now that you have created the two tables, it will be good for you to confirm whether the tables were created successfully or not. You can show the list of tables contained in a database by running the following command:

```
SHOW TABLES;
```

```
MariaDB [Demo] > SHOW TABLES;  
+-----+  
| Tables_in_demo |  
+-----+  
| book           |  
| price          |  
+-----+  
2 rows in set (0.177 sec)  
MariaDB [Demo] >
```

The above screenshot shows that the two tables were created successfully within the Demo database.

## Showing Table Structure

To see the structure of any particular table, you can use the DESCRIBE command, commonly abbreviated as DESC. It takes the following syntax:

```
DESC TableName;
```

For example, to see the structure of the table named Book, you can run the following command;

```
DESC Book;
```

```
MariaDB [Demo]> DESC Book;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id    | int(11)       | NO   | PRI | NULL    | auto_increment |
| name  | varchar(100)  | NO   |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.231 sec)
MariaDB [Demo]>
```

The table has two columns. To see the structure of the Price table, you can run the following command:

```
DESC Price;
```

```
MariaDB [Demo]> DESC Price;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id    | int(11)       | NO   | PRI | NULL    | auto_increment |
| price | float         | NO   |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.012 sec)
MariaDB [Demo]>
```

### Assignment

1. Explain steps to create table and show tables
2. what is the command to show table structure