C2- S2-PRACTICE

*NOTE: check your **THEORY slides** to answer those questions!*

EXERCISE 1

Q1) write a statement to create a database named “school”

To create a database name school: create database school;

```
MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| freebookonline     |
| information_schema |
| mysql              |
| onlinebook         |
| performance_schema |
| personal           |
| personal_db        |
| phpmyadmin         |
| practice           |
| school             |
| shop_db            |
| test               |
+--------------------+
12 rows in set (0.001 sec)
```

Q2) write a statement to drop a database named “school”

To create a database name school: drop database school;

```
MariaDB [(none)]> drop database school;
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| freebookonline     |
| information_schema |
| mysql              |
| onlinebook         |
| performance_schema |
| personal           |
| personal_db        |
| phpmyadmin         |
| practice           |
| shop_db            |
| test               |
+--------------------+
11 rows in set (0.001 sec)
```

EXERCISE 2 – Stock database

Q1) Write a statement to create a database called “stock”.

```
MariaDB [(none)]> create database stock;
Query OK, 1 row affected (0.001 sec)
```

Q2) Write a statement to check if the database “stock” is stored in your MySQL server.

```
MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| freebookonline     |
| information_schema |
| mysql              |
| onlinebook         |
| performance_schema |
| personal           |
| personal_db        |
| phpmyadmin         |
| practice           |
| shop_db            |
| stock              |
| test               |
+--------------------+
12 rows in set (0.001 sec)
```

Q3) Write a statement to tell MySQL that you are now working on the database named “stock”.

```
MariaDB [(none)]> use stock;
Database changed
MariaDB [stock]>
```

Q4) Write a statement to create a table called “category” that has the following structure and check that it has the same structure with the statement:

DESCRIBE category;

or

DESC category;

```
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| catid       | int          | NO   | PK  | NULL    |       |
| catname     | varchar(50)  | NO   |     | NULL    |       |
| description | varchar(220) | YES  |     | NULL    |       |
| mastercatid | int          | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
```

```
MariaDB [stock]> create table category(
    -> catid int NOT NULL,
    -> catname varchar(50) NOT NULL,
    -> description varchar(220),
    -> mastercatid int,
    -> PRIMARY KEY(catid)
    -> );
Query OK, 0 rows affected (0.025 sec)

MariaDB [stock]> describe category;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| catid       | int(11)      | NO   | PRI | NULL    |       |
| catname     | varchar(50)  | NO   |     | NULL    |       |
| description | varchar(220) | YES  |     | NULL    |       |
| mastercatid | int(11)      | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
4 rows in set (0.007 sec)

MariaDB [stock]>
```

Q5) Write a statement to create a table called “supplier” that has the following structure:

```
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| supplierid   | int         | NO   |  PK | NULL    |       |
| suppliername | varchar(40) | NO   |     | NULL    |       |
| phone        | varchar(12) | YES  |     | NULL    |       |
| email        | varchar(40) | YES  |     | NULL    |       |
| logo         | longblob    | YES  |     | NULL    |       |
| isdeleted    | int         | YES  |     | 0       |       |
+--------------+-------------+------+-----+---------+-------+
```

```
MariaDB [stock]> create table supplier(
    -> supplierid int NOT NULL,
    -> suppliername varchar(40) NOT NULL,
    -> phone varchar(12),
    -> email varchar(40),
    -> logo longblob,
    -> isdeleted int,
    -> PRIMARY KEY(supplierid)
    -> );
Query OK, 0 rows affected (0.024 sec)
```

```
MariaDB [stock]> alter table supplier modify isdeleted int DEFAULT(0);
Query OK, 0 rows affected (0.008 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [stock]> describe supplier;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| supplierid   | int(11)     | NO   | PRI | NULL    |       |
| suppliername | varchar(40) | NO   |     | NULL    |       |
| phone        | varchar(12) | YES  |     | NULL    |       |
| email        | varchar(40) | YES  |     | NULL    |       |
| logo         | longblob    | YES  |     | NULL    |       |
| isdeleted    | int(11)     | YES  |     | 0       |       |
+--------------+-------------+------+-----+---------+-------+
6 rows in set (0.006 sec)
```

Q6) Write a statement to create a table called “masterproductlist” that has the following structure:

```
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| productid   | int          | NO   | PK  | NULL    |       |
| productname | varchar(120) | NO   |     | NULL    |       |
| barcode     | varchar(40)  | YES  |     | NULL    |       |
| model       | varchar(40)  | YES  |     | NULL    |       |
| size        | varchar(40)  | YES  |     | NULL    |       |
| unitfactor  | varchar(30)  | YES  |     | NULL    |       |
| catid       | int          | YES  |     | NULL    |       |
| storeid     | int          | YES  |     | NULL    |       |
| isdelete    | int          | NO   |     | 0       |       |
| description | varchar(220) | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
```

```
MariaDB [stock]> create table masterproductlist(
    -> productid int NOT NULL,
    -> productname varchar(120) NOT NULL,
    -> barcode varchar(40),
    -> model varchar(40),
    -> size varchar(40),
    -> unitfactor varchar(30),
    -> catid int,
    -> storeid int,
    -> isdelete int NOT NULL,
    -> description varchar(220),
    -> PRIMARY KEY(productid)
    -> );
Query OK, 0 rows affected (0.018 sec)

MariaDB [stock]> Describe masterproductlist;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| productid   | int(11)      | NO   | PRI | NULL    |       |
| productname | varchar(120) | NO   |     | NULL    |       |
| barcode     | varchar(40)  | YES  |     | NULL    |       |
| model       | varchar(40)  | YES  |     | NULL    |       |
| size        | varchar(40)  | YES  |     | NULL    |       |
| unitfactor  | varchar(30)  | YES  |     | NULL    |       |
| catid       | int(11)      | YES  |     | NULL    |       |
| storeid     | int(11)      | YES  |     | NULL    |       |
| isdelete    | int(11)      | NO   |     | NULL    |       |
| description | varchar(220) | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
10 rows in set (0.007 sec)
```

```
MariaDB [stock]> alter table masterproductlist modify isdelete int DEFAULT(0) NOT N
ULL;
Query OK, 0 rows affected (0.051 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [stock]> describe masterproductlist;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| productid   | int(11)      | NO   | PRI | NULL    |       |
| productname | varchar(120) | NO   |     | NULL    |       |
| barcode     | varchar(40)  | YES  |     | NULL    |       |
| model       | varchar(40)  | YES  |     | NULL    |       |
| size        | varchar(40)  | YES  |     | NULL    |       |
| unitfactor  | varchar(30)  | YES  |     | NULL    |       |
| catid       | int(11)      | YES  |     | NULL    |       |
| storeid     | int(11)      | YES  |     | NULL    |       |
| isdelete    | int(11)      | NO   |     | 0       |       |
| description | varchar(220) | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
10 rows in set (0.004 sec)

MariaDB [stock]>
```

Q7) Write a statement to create a table called “store” that has the following structure:

Field	Type	Null	Key	Default	Extra
storeid	int	NO	PK	NULL	
storename	varchar(40)	NO		NULL	
description	varchar(220)	YES		NULL	
locationid	int	YES		NULL	
managerid	int	YES		NULL	
isdeleted	int	NO		0	

Check slides

```
MariaDB [stock]> create table store(
    -> storeid int NOT NULL,
    -> storename varchar(40) NOT NULL,
    -> description varchar(220),
    -> locationid int,
    -> managerid int,
    -> isdeleted int DEFAULT(0) NOT NULL,
    -> PRIMARY KEY(storeid)
    -> );
Query OK, 0 rows affected (0.026 sec)

MariaDB [stock]> describe store;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| storeid     | int(11)      | NO   | PRI | NULL    |       |
| storename   | varchar(40)  | NO   |     | NULL    |       |
| description | varchar(220) | YES  |     | NULL    |       |
| locationid  | int(11)      | YES  |     | NULL    |       |
| managerid   | int(11)      | YES  |     | NULL    |       |
| isdeleted   | int(11)      | NO   |     | 0       |       |
+-------------+--------------+------+-----+---------+-------+
6 rows in set (0.006 sec)
```

Q8) Write a statement to create a table called “location” that has the following structures:

Field	Type	Null	Key	Default	Extra
locationid	int	NO	PK	NULL	
locationname	varchar(50)	NO		NULL	
description	varchar(200)	YES		NULL	
managerid	varchar(20)	YES		NULL	

```
MariaDB [stock]> create table location(
    -> locationid int NOT NULL,
    -> locationname varchar(50) NOT NULL,
    -> description varchar(200),
    -> managerid varchar(20),
    -> PRIMARY KEY(locationid)
    -> );
Query OK, 0 rows affected (0.030 sec)

MariaDB [stock]> describe location;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| locationid   | int(11)      | NO   | PRI | NULL    |       |
| locationname | varchar(50)  | NO   |     | NULL    |       |
| description  | varchar(200) | YES  |     | NULL    |       |
| managerid    | varchar(20)  | YES  |     | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
4 rows in set (0.007 sec)
```

Q9) Write a statement to add a new column called “isdeleted” to be type of integer after column “mastercatid” in table “category” by setting the default value to 0.

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```
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| catid       | int          | NO   | PK  | NULL    |       |
| catname     | varchar(50)  | NO   |     | NULL    |       |
| description | varchar(220) | YES  |     | NULL    |       |
| mastercatid | int          | YES  |     | NULL    |       |
| isdeleted   | int          | YES  |     | 0       |       |
+-------------+--------------+------+-----+---------+-------+
```

```
MariaDB [stock]> alter table category add isdeleted int DEFAULT 0;
Query OK, 0 rows affected (0.011 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [stock]> describe category;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| catid       | int(11)      | NO   | PRI | NULL    |       |
| catname     | varchar(50)  | NO   |     | NULL    |       |
| description | varchar(220) | YES  |     | NULL    |       |
| mastercatid | int(11)      | YES  |     | NULL    |       |
| isdeleted   | int(11)      | YES  |     | 0       |       |
+-------------+--------------+------+-----+---------+-------+
5 rows in set (0.006 sec)
```

Q10) Write a statement to remove a column called “managerid” from table “location”.

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Field	Type	Null	Key	Default	Extra
locationid	int	NO	PK	NULL	
locationname	varchar(50)	NO		NULL	
description	varchar(200)	YES		NULL	
~~managerid~~	~~varchar(20)~~	~~YES~~		~~NULL~~	

```
MariaDB [stock]> alter table location drop managerid;
Query OK, 0 rows affected (0.014 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [stock]> describe location;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| locationid   | int(11)      | NO   | PRI | NULL    |       |
| locationname | varchar(50)  | NO   |     | NULL    |       |
| description  | varchar(200) | YES  |     | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
3 rows in set (0.007 sec)
```

Q11) Write a statement to rename column “logo” to “companylogo” in table “supplier”

Check slides

Field	Type	Null	Key	Default	Extra
supplierid	int	NO	PK	NULL	
suppliername	varchar(40)	NO		NULL	
phone	varchar(12)	YES		NULL	
email	varchar(40)	YES		NULL	
companylogo	longblob	YES		NULL	
isdeleted	int	YES		0	

```
MariaDB [stock]> alter table supplier
    -> change column
    -> logo
    -> companylogo
    -> longblob;
Query OK, 0 rows affected (0.012 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [stock]> DESC supplier;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| supplierid   | int(11)     | NO   | PRI | NULL    |       |
| suppliername | varchar(40) | NO   |     | NULL    |       |
| phone        | varchar(12) | YES  |     | NULL    |       |
| email        | varchar(40) | YES  |     | NULL    |       |
| companylogo  | longblob    | YES  |     | NULL    |       |
| isdeleted    | int(11)     | YES  |     | 0       |       |
+--------------+-------------+------+-----+---------+-------+
6 rows in set (0.005 sec)

MariaDB [stock]>
```

Q12) Write a statement to rename table “masterproductlist” to table “productlist”.

Check slides

```
+------------------+
| Tables_in_stock  |
+------------------+
| category         |
| location         |
| productlist      |
| store            |
| supplier         |
+------------------+
```

```
MariaDB [stock]> RENAME TABLE masterproductlist TO productlist;
Query OK, 0 rows affected (0.015 sec)

MariaDB [stock]> DESC productlist;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| productid   | int(11)      | NO   | PRI | NULL    |       |
| productname | varchar(120) | NO   |     | NULL    |       |
| barcode     | varchar(40)  | YES  |     | NULL    |       |
| model       | varchar(40)  | YES  |     | NULL    |       |
| size        | varchar(40)  | YES  |     | NULL    |       |
| unitfactor  | varchar(30)  | YES  |     | NULL    |       |
| catid       | int(11)      | YES  |     | NULL    |       |
| storeid     | int(11)      | YES  |     | NULL    |       |
| isdelete    | int(11)      | NO   |     | 0       |       |
| description | varchar(220) | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
10 rows in set (0.008 sec)
```

Q13) Write a statement to create a new table called “product” that has the same structure as table “productlist” by using the LIKE statement.

```
CREATE TABLE IF NOT EXISTS <newTable> LIKE <oldTable>;
```

```
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| productid   | int          | NO   |  PK | NULL    |       |
| productname | varchar(120) | NO   |     | NULL    |       |
| barcode     | varchar(40)  | YES  |     | NULL    |       |
| model       | varchar(40)  | YES  |     | NULL    |       |
| size        | varchar(40)  | YES  |     | NULL    |       |
| unitfactor  | varchar(30)  | YES  |     | NULL    |       |
| catid       | int          | YES  |     | NULL    |       |
| storeid     | int          | YES  |     | NULL    |       |
| isdelete    | int          | NO   |     | 0       |       |
| description | varchar(220) | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
```

```
MariaDB [stock]> CREATE TABLE IF NOT EXISTS product LIKE productlist;
Query OK, 0 rows affected (0.023 sec)

MariaDB [stock]> DESC product;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| productid   | int(11)      | NO   | PRI | NULL    |       |
| productname | varchar(120) | NO   |     | NULL    |       |
| barcode     | varchar(40)  | YES  |     | NULL    |       |
| model       | varchar(40)  | YES  |     | NULL    |       |
| size        | varchar(40)  | YES  |     | NULL    |       |
| unitfactor  | varchar(30)  | YES  |     | NULL    |       |
| catid       | int(11)      | YES  |     | NULL    |       |
| storeid     | int(11)      | YES  |     | NULL    |       |
| isdelete    | int(11)      | NO   |     | 0       |       |
| description | varchar(220) | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
10 rows in set (0.006 sec)
```

Q14) Write a statement to create a table called “positionlist” that has the following structures:

Field	Type	Null	Key	Default	Extra
positionid	int	NO	PK	NULL	
positionname	varchar(50)	NO		NULL	
description	varchar(200)	YES		NULL	

```
MariaDB [stock]> create table positionlist(
    -> positionid int NOT NULL,
    -> positionname varchar(50) NOT NULL,
    -> description varchar(200),
    -> PRIMARY KEY(positionid)
    -> );
Query OK, 0 rows affected (0.018 sec)

MariaDB [stock]> DESC positionlist;
+--------------+--------------+------+-----+---------+-------+
| Field        | Type         | Null | Key | Default | Extra |
+--------------+--------------+------+-----+---------+-------+
| positionid   | int(11)      | NO   | PRI | NULL    |       |
| positionname | varchar(50)  | NO   |     | NULL    |       |
| description  | varchar(200) | YES  |     | NULL    |       |
+--------------+--------------+------+-----+---------+-------+
3 rows in set (0.007 sec)
```

Q15) Write a statement to create a table called “department” that has the following structures:

Field	Type	Null	Key	Default	Extra
depid	int	NO	PK	NULL	
depname	varchar(40)	NO		NULL	
description	varchar(200)	YES		NULL	

```
MariaDB [stock]> create table department(
    -> depid int NOT NULL,
    -> depname varchar(40) NOT NULL,
    -> description varchar(200),
    -> PRIMARY KEY(depid)
    -> );
Query OK, 0 rows affected (0.022 sec)

MariaDB [stock]> DESC department;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| depid       | int(11)      | NO   | PRI | NULL    |       |
| depname     | varchar(40)  | NO   |     | NULL    |       |
| description | varchar(200) | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
3 rows in set (0.007 sec)
```