

LAB TASK # 2

SOLUTION # 2.1:

```
MariaDB [(none)]>
MariaDB [(none)]> CREATE DATABASE THEMEPARK;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> SHOW DATABASES;
+-----+
| Database |
+-----+
| AHMEDALI |
| FORM     |
| LABTASK2 |
| LABTASK_3|
| ORGANIZATION |
| P190042_ALI |
| THEMEPARK |
| information_schema |
| mysql     |
| organizationn |
| organizations |
| performance_schema |
| phpmyadmin |
| test      |
+-----+
14 rows in set (0.001 sec)

MariaDB [(none)]> USE THEMEPARK;
Database changed
```

SOLUTION # 2.2:

```
MariaDB [THEMEPARK]> CREATE TABLE THEMEPARK (
    -> PARK_CODE VARCHAR(10) PRIMARY KEY,
    -> PARK_NAME VARCHAR(35) NOT NULL,
    -> PARK_CITY VARCHAR(50) NOT NULL,
    -> PARK_COUNTRY CHAR(2) NOT NULL);
Query OK, 0 rows affected (0.315 sec)
```

SOLUTION # 2.3:

```
Database changed
MariaDB [THEMEPARK]> CREATE TABLE EMPLOYEE (
  -> EMP_NUM NUMERIC(4) PRIMARY KEY,
  -> EMP_TITLE VARCHAR(4),
  -> EMP_LNAME VARCHAR(15) NOT NULL,
  -> EMP_FNAME VARCHAR(15) NOT NULL,
  -> EMP_DOB DATE NOT NULL,
  -> EMP_HIRE_DATE DATE,
  -> EMP_AREA_CODE VARCHAR(4) NOT NULL,
  -> EMP_PHONE VARCHAR(12) NOT NULL,
  -> PARK_CODE VARCHAR(10),
  -> INDEX (PARK_CODE),
  -> CONSTRAINT FK_EMP_PARK FOREIGN KEY(PARK_CODE) REFERENCES
  ->
  -> THEMEPARK(PARK_CODE));
Query OK, 0 rows affected (0.321 sec)
```

SOLUTION # 2.4:

```
MariaDB [THEMEPARK]> CREATE TABLE TICKET (
  -> TICKET_NO NUMERIC(10) PRIMARY KEY,
  -> TICKET_PRICE NUMERIC(4,2) DEFAULT 00.00 NOT NULL,
  -> TICKET_TYPE VARCHAR(10),
  -> PARK_CODE VARCHAR(10),
  -> INDEX (PARK_CODE),
  -> CONSTRAINT FK_TICKET_PARK FOREIGN KEY(PARK_CODE)
  -> REFERENCES THEMEPARK(PARK_CODE));
Query OK, 0 rows affected (0.348 sec)
```

SOLUTION # 2.5:

```
MariaDB [THEMEPARK]> CREATE TABLE ATTRACTION (  
-> ATTRACT_NO NUMERIC(10) PRIMARY KEY,  
-> ATTRACT_NAME VARCHAR(35),  
-> ATTRACT_AGE NUMERIC(3) DEFAULT 0 NOT NULL,  
-> ATTRACT_CAPACITY NUMERIC(3) NOT NULL,  
-> PARK_CODE VARCHAR(10),  
-> INDEX (PARK_CODE),  
-> CONSTRAINT FK_ATTRACT_PARK FOREIGN KEY(PARK_CODE)  
-> REFERENCES THEMEPARK(PARK_CODE));  
Query OK, 0 rows affected (0.296 sec)
```

SOLUTION # 2.6:

```
MariaDB [THEMEPARK]> CREATE TABLE HOURS (  
-> EMP_NUM NUMERIC(4),  
-> ATTRACT_NO NUMERIC(10),  
-> HOURS_PER_ATTRACT NUMERIC(2) NOT NULL,  
-> HOUR_RATE NUMERIC(4,2) NOT NULL,  
-> DATE_WORKED DATE NOT NULL,  
-> INDEX (EMP_NUM),  
-> INDEX (ATTRACT_NO),  
-> CONSTRAINT PK_HOURS PRIMARY KEY (EMP_NUM, ATTRACT_NO,  
-> DATE_WORKED),  
-> CONSTRAINT FK_HOURS_EMP FOREIGN KEY (EMP_NUM)  
-> REFERENCES EMPLOYEE(EMP_NUM),  
-> CONSTRAINT FK_HOURS_ATTRACT FOREIGN KEY (ATTRACT_NO)  
-> REFERENCES ATTRACTION(ATTRACT_NO));  
Query OK, 0 rows affected, 1 warning (0.361 sec)
```

SOLUTION # 2.7 :

```
MariaDB [THEMEPARK]> CREATE TABLE SALES (  
-> TRANSACTION_NO NUMERIC PRIMARY KEY,  
-> PARK_CODE VARCHAR(10),  
-> SALE_DATE DATE NOT NULL,  
-> INDEX (PARK_CODE),  
-> CONSTRAINT FK_SALES_PARK FOREIGN KEY(PARK_CODE) REFERENCES THEMEPARK(PARK_CODE));  
Query OK, 0 rows affected (0.423 sec)
```

SOLUTION # 2.8 :

```
MariaDB [THEMEPARK]> CREATE TABLE SALES_LINE (  
-> TRANSACTION_NO NUMERIC,  
-> LINE_NO NUMERIC(2,0) NOT NULL,  
-> TICKET_NO NUMERIC(10) NOT NULL,  
-> LINE_QTY NUMERIC(4) DEFAULT 0 NOT NULL,  
-> LINE_PRICE NUMERIC(9,2) DEFAULT 0.00 NOT NULL,  
-> INDEX (TRANSACTION_NO),  
-> INDEX (TICKET_NO),  
-> CONSTRAINT PK_SALES_LINE PRIMARY KEY  
-> (TRANSACTION_NO,LINE_NO),  
-> CONSTRAINT FK_SALES_LINE_SALES FOREIGN KEY  
-> (TRANSACTION_NO) REFERENCES SALES(TRANSACTION_NO),  
-> CONSTRAINT FK_SALES_LINE_TICKET FOREIGN KEY (TICKET_NO)  
-> REFERENCES TICKET(TICKET_NO));  
Query OK, 0 rows affected, 1 warning (0.343 sec)
```

SOLUTION # 2.10 :

```
MariaDB [THEMEPARK]> DESCRIBE EMPLOYEE;
```

Field	Type	Null	Key	Default	Extra
EMP_NUM	decimal(4,0)	NO	PRI	NULL	
EMP_TITLE	varchar(4)	YES		NULL	
EMP_LNAME	varchar(15)	NO		NULL	
EMP_FNAME	varchar(15)	NO		NULL	
EMP_DOB	date	NO		NULL	
EMP_HIRE_DATE	date	YES		NULL	
EMP_AREA_CODE	varchar(4)	NO		NULL	
EMP_PHONE	varchar(12)	NO		NULL	
PARK_CODE	varchar(10)	YES	MUL	NULL	

```
9 rows in set (0.003 sec)
```

```
MariaDB [THEMEPARK]> DESCRIBE TICKET;
```

Field	Type	Null	Key	Default	Extra
TICKET_NO	decimal(10,0)	NO	PRI	NULL	
TICKET_PRICE	decimal(4,2)	NO		0.00	
TICKET_TYPE	varchar(10)	YES		NULL	
PARK_CODE	varchar(10)	YES	MUL	NULL	

```
4 rows in set (0.003 sec)
```

```
MariaDB [THEMEPARK]> DESCRIBE ATTRACTION;
```

Field	Type	Null	Key	Default	Extra
ATTRACT_NO	decimal(10,0)	NO	PRI	NULL	
ATTRACT_NAME	varchar(35)	YES		NULL	
ATTRACT_AGE	decimal(3,0)	NO		0	
ATTRACT_CAPACITY	decimal(3,0)	NO		NULL	
PARK_CODE	varchar(10)	YES	MUL	NULL	

SOLUTION # 2.11 :

```
MariaDB [THEMEPARK]> SHOW TABLES;
```

Tables_in_THEMEPARK
ATTRACTION
EMPLOYEE
HOURS
SALES
SALES_LINE
THEMEPARK
TICKET

```
7 rows in set (0.001 sec)
```

SOLUTION # 2.12:

```

MariaDB [THEMEPARK]> INSERT INTO THEMEPARK VALUES ('FR1001','FairyLand','PARIS','FR');
Query OK, 1 row affected (0.066 sec)

MariaDB [THEMEPARK]> INSERT INTO THEMEPARK VALUES ('UK3452','PleasureLand','STOKE','UK');
Query OK, 1 row affected (0.047 sec)

MariaDB [THEMEPARK]> SELECT * FROM THEMEPARK;
+-----+-----+-----+-----+
| PARK_CODE | PARK_NAME   | PARK_CITY | PARK_COUNTRY |
+-----+-----+-----+-----+
| FR1001    | FairyLand   | PARIS     | FR            |
| UK3452    | PleasureLand| STOKE     | UK            |
+-----+-----+-----+-----+
2 rows in set (0.001 sec)

```

SOLUTION # 2.13:

```

MariaDB [THEMEPARK]> INSERT INTO TICKET VALUES (13001,18.99,'Child','FR1001');
Query OK, 1 row affected (0.043 sec)

MariaDB [THEMEPARK]> INSERT INTO TICKET VALUES (13002,34.99,'Adult','FR1001');
Query OK, 1 row affected (0.043 sec)

MariaDB [THEMEPARK]> INSERT INTO TICKET VALUES (13003,20.99,'Senior','FR1001');
Query OK, 1 row affected (0.057 sec)

MariaDB [THEMEPARK]> INSERT INTO TICKET VALUES (88567,22.50,'Child','UK3452');
Query OK, 1 row affected (0.044 sec)

MariaDB [THEMEPARK]> INSERT INTO TICKET VALUES (88568,42.10,'Adult','UK3452');
Query OK, 1 row affected (0.144 sec)

MariaDB [THEMEPARK]> INSERT INTO TICKET VALUES (89720,10.99,'Senior','UK3452');
Query OK, 1 row affected (0.052 sec)

MariaDB [THEMEPARK]> SELECT * FROM TICKET;
+-----+-----+-----+-----+
| TICKET_NO | TICKET_PRICE | TICKET_TYPE | PARK_CODE |
+-----+-----+-----+-----+
| 13001     | 18.99        | Child       | FR1001    |
| 13002     | 34.99        | Adult       | FR1001    |
| 13003     | 20.99        | Senior      | FR1001    |
| 88567     | 22.50        | Child       | UK3452    |
| 88568     | 42.10        | Adult       | UK3452    |
| 89720     | 10.99        | Senior      | UK3452    |
+-----+-----+-----+-----+
6 rows in set (0.001 sec)

```

SOLUTION # 2.17:

```
MariaDB [THEMEPARK]> INSERT INTO THEMEPARK VALUES ('AU1001' , 'SKIWORLD' , 'AU' , 'UK');
Query OK, 1 row affected (0.056 sec)
```

```
MariaDB [THEMEPARK]> INSERT INTO THEMEPARK VALUES('GR5001' , 'ROBOLAND' , 'GR' , 'SP');
Query OK, 1 row affected (0.060 sec)
```

```
MariaDB [THEMEPARK]> SELECT * FROM THEMEPARK;
```

PARK_CODE	PARK_NAME	PARK_CITY	PARK_COUNTRY
AU1001	SKIWORLD	AU	UK
FR1001	FairyLand	PARIS	FR
GR5001	ROBOLAND	GR	SP
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW
UK2622	MiniLand	WINDSOR	UK
UK3452	PleasureLand	STOKE	UK
ZA1342	GoldTown	JOHANNESBURG	ZA

```
9 rows in set (0.001 sec)
```

SOLUTION # 2.18:

```
MariaDB [THEMEPARK]> DESCRIBE EMPLOYEE;
```

Field	Type	Null	Key	Default	Extra
EMP_NUM	decimal(4,0)	NO	PRI	NULL	
EMP_TITLE	varchar(4)	YES		NULL	
EMP_LNAME	varchar(15)	NO	MUL	NULL	
EMP_FNAME	varchar(15)	NO		NULL	
EMP_DOB	date	NO		NULL	
EMP_HIRE_DATE	date	YES		NULL	
EMP_AREA_CODE	varchar(4)	NO		NULL	
EMP_PHONE	varchar(12)	NO		NULL	
PARK_CODE	varchar(10)	YES	MUL	NULL	

```
9 rows in set (0.002 sec)
```

```
MariaDB [THEMEPARK]> INSERT INTO EMPLOYEE VALUES (2049 , 'MR' , 'RAHAT' , 'NOMAN' , '1990-12-20' , '2015-5-5' , '7253' , '502-49304' , 'AU1001');
Query OK, 1 row affected (0.072 sec)
```

```
MariaDB [THEMEPARK]> SELECT * FROM EMPLOYEE;
```

EMP_NUM	EMP_TITLE	EMP_LNAME	EMP_FNAME	EMP_DOB	EMP_HIRE_DATE	EMP_AREA_CODE	EMP_PHONE	PARK_CODE
100	Ms	Calderdale	Emma	1972-06-15	1992-03-15	0181	324-9134	FR1001
101	Ms	Ricardo	Marshel	1978-03-19	1996-04-25	0181	324-4472	UK3452
102	Mr	Arshad	Arif	1969-11-14	1990-12-20	7253	675-8993	FR1001
103	Ms	Roberts	Anne	1974-10-16	1994-08-16	0181	898-3456	UK3452
104	Mr	Denver	Enrica	1980-11-08	2001-10-20	7253	504-4434	ZA1342
105	Ms	Namowa	Mirrelle	1990-03-14	2006-11-08	0181	890-3243	FR1001
106	Mrs	Smith	Gemma	1968-02-12	1989-01-05	0181	324-7845	ZA1342
2049	MR	RAHAT	NOMAN	1990-12-20	2015-05-05	7253	502-49304	AU1001

```
8 rows in set (0.001 sec)
```

SOLUTION # 2.19:

```
ahmed@ahmed-Inspiron-N4050: ~  
MariaDB [THEMEPARK]> SELECT * FROM THEMEPARK;  
+-----+-----+-----+-----+  
| PARK_CODE | PARK_NAME | PARK_CITY | PARK_COUNTRY |  
+-----+-----+-----+-----+  
| AU1001 | SKIWORLD | AU | UK |  
| FR1001 | FairyLand | PARIS | FR |  
| GR5001 | ROBOLAND | GR | SP |  
| NL1202 | Efling | NOORD | NL |  
| SP4533 | AdventurePort | BARCELONA | SP |  
| SW2323 | Labyrinthe | LAUSANNE | SW |  
| UK2622 | Miniland | WINDSOR | UK |  
| UK3452 | PleasureLand | STOKE | UK |  
| ZA1342 | GoldTown | JOHANNESBURG | ZA |  
+-----+-----+-----+-----+  
9 rows in set (0.001 sec)  
  
MariaDB [THEMEPARK]> SELECT * FROM THEMEPARK WHERE PARK_CODE = 'AU1001';  
+-----+-----+-----+-----+  
| PARK_CODE | PARK_NAME | PARK_CITY | PARK_COUNTRY |  
+-----+-----+-----+-----+  
| AU1001 | SKIWORLD | AU | UK |  
+-----+-----+-----+-----+  
1 row in set (0.001 sec)  
  
MariaDB [THEMEPARK]> UPDATE THEMEPARK  
-> SET PARK_NAME = "MINILAND"  
-> WHERE PARK_CODE = "AU1001";  
Query OK, 1 row affected (0.053 sec)  
Rows matched: 1 Changed: 1 Warnings: 0  
  
MariaDB [THEMEPARK]> SELECT * FROM THEMEPARK WHERE PARK_CODE = 'AU1001';  
+-----+-----+-----+-----+  
| PARK_CODE | PARK_NAME | PARK_CITY | PARK_COUNTRY |  
+-----+-----+-----+-----+  
| AU1001 | MINILAND | AU | UK |  
+-----+-----+-----+-----+  
1 row in set (0.001 sec)
```

SOLUTION # 2.20:

```
ahmed@ahmed-Inspiron-N4050: ~  
MariaDB [THEMEPARK]> SELECT * FROM THEMEPARK;  
+-----+-----+-----+-----+  
| PARK_CODE | PARK_NAME | PARK_CITY | PARK_COUNTRY |  
+-----+-----+-----+-----+  
| AU1001 | MINILAND | AU | UK |  
| FR1001 | FairyLand | PARIS | FR |  
| GR5001 | ROBOLAND | GR | SP |  
| NL1202 | Efling | NOORD | NL |  
| SP4533 | AdventurePort | BARCELONA | SP |  
| SW2323 | Labyrinthe | LAUSANNE | SW |  
| UK2622 | Miniland | WINDSOR | UK |  
| UK3452 | PleasureLand | STOKE | UK |  
| ZA1342 | GoldTown | JOHANNESBURG | ZA |  
+-----+-----+-----+-----+  
9 rows in set (0.001 sec)  
  
MariaDB [THEMEPARK]> DELETE  
-> FROM THEMEPARK  
-> WHERE PARK_CODE = " GR5001";  
Query OK, 0 rows affected (0.001 sec)  
  
MariaDB [THEMEPARK]> SELECT * FROM THEMEPARK;  
+-----+-----+-----+-----+  
| PARK_CODE | PARK_NAME | PARK_CITY | PARK_COUNTRY |  
+-----+-----+-----+-----+  
| AU1001 | MINILAND | AU | UK |  
| FR1001 | FairyLand | PARIS | FR |  
| GR5001 | ROBOLAND | GR | SP |  
| NL1202 | Efling | NOORD | NL |  
| SP4533 | AdventurePort | BARCELONA | SP |  
| SW2323 | Labyrinthe | LAUSANNE | SW |  
| UK2622 | Miniland | WINDSOR | UK |  
| UK3452 | PleasureLand | STOKE | UK |  
| ZA1342 | GoldTown | JOHANNESBURG | ZA |  
+-----+-----+-----+-----+  
9 rows in set (0.001 sec)  
  
MariaDB [THEMEPARK]>
```