ASSESSMENT-4 introduction to dbms

➔ Create database BUSINESS_MANAGE_DB and table named customer and salesman.

```
mysql> CREATE DATABASE BUSINESS_MANAGE_DB;
Query OK, 1 row affected (0.01 sec)

mysql> USE BUSINESS_MANAGE_DB;
Database changed
mysql> CREATE TABLE CUSTOMER(
    -> CUSTOMER_ID INT,
    -> CUSTOMER_NAME VARCHAR(255) NOT NULL,
    -> CITY VARCHAR(255) NOT NULL,
    -> GRADE INT NOT NULL,
    -> SALESMAN_ID INT,
    -> PRIMARY KEY(CUSTOMER_ID));
Query OK, 0 rows affected (0.02 sec)

mysql> DESC CUSTOMER;
+---------------+--------------+------+-----+---------+-------+
| Field         | Type         | Null | Key | Default | Extra |
+---------------+--------------+------+-----+---------+-------+
| CUSTOMER_ID   | int          | NO   | PRI | NULL    |       |
| CUSTOMER_NAME | varchar(255) | NO   |     | NULL    |       |
| CITY          | varchar(255) | NO   |     | NULL    |       |
| GRADE         | int          | NO   |     | NULL    |       |
| SALESMAN_ID   | int          | YES  |     | NULL    |       |
+---------------+--------------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```

```
mysql> CREATE TABLE SALESMAN(
    -> SALESMAN_ID INT PRIMARY KEY,
    -> SALESMAN_NAME VARCHAR(255) NOT NULL,
    -> CITY VARCHAR(255) NOT NULL,
    -> COMMISSION FLOAT NOT NULL);
Query OK, 0 rows affected (0.02 sec)

mysql> DESC SALESMAN;
+---------------+--------------+------+-----+---------+-------+
| Field         | Type         | Null | Key | Default | Extra |
+---------------+--------------+------+-----+---------+-------+
| SALESMAN_ID   | int          | NO   | PRI | NULL    |       |
| SALESMAN_NAME | varchar(255) | NO   |     | NULL    |       |
| CITY          | varchar(255) | NO   |     | NULL    |       |
| COMMISSION    | float        | NO   |     | NULL    |       |
+---------------+--------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

```
mysql> INSERT INTO SALESMAN VALUES
    -> (5001,'JAMES HOOG','NEW YORK',0.15),
    -> (5002,'NAIL KNITE','PARIS',0.13),
    -> (5005,'PIT ALEX','LONDON',0.11),
    -> (5006,'MC LYON','PARIS',0.14),
    -> (5007,'PAUL ADAM','ROME',0.13),
    -> (5003,'LAUSON HEN','SAN JOSE',0.12);
Query OK, 6 rows affected (0.01 sec)
Records: 6  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM SALESMAN;
+-------------+---------------+----------+------------+
| SALESMAN_ID | SALESMAN_NAME | CITY     | COMMISSION |
+-------------+---------------+----------+------------+
|        5001 | JAMES HOOG    | NEW YORK |       0.15 |
|        5002 | NAIL KNITE    | PARIS    |       0.13 |
|        5003 | LAUSON HEN    | SAN JOSE |       0.12 |
|        5005 | PIT ALEX      | LONDON   |       0.11 |
|        5006 | MC LYON       | PARIS    |       0.14 |
|        5007 | PAUL ADAM     | ROME     |       0.13 |
+-------------+---------------+----------+------------+
6 rows in set (0.00 sec)
```

```
mysql> INSERT INTO CUSTOMER VALUES
    -> (3002,'NICK RIMANDO','NEW YORK',100,5001);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO CUSTOMER VALUES
    -> (3007,'BRAD DAVIS','NEW YORK',200,5001);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO CUSTOMER VALUES
    -> (3005,'GRAHAM ZUSI','CALIFORNIA',200,5002);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO CUSTOMER VALUES
    -> (3008,'JULIAN GREEN','LONDON',300,5002);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO CUSTOMER VALUES
    -> (3004,'FABIAN JOHNSON','PARIS',300,5006);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO CUSTOMER VALUES
    -> (3009,'GEOFF CAMERON','BERLIN',100,5003);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> ALTER TABLE CUSTOMER
    -> ADD CONSTRAINT FK_SALESMAN_ID
    -> FOREIGN KEY(SALESMAN_ID)
    -> REFERENCES SALESMAN(SALESMAN_ID);
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> DESC CUSTOMER;
+---------------+--------------+------+-----+---------+-------+
| Field         | Type         | Null | Key | Default | Extra |
+---------------+--------------+------+-----+---------+-------+
| CUSTOMER_ID   | int          | NO   | PRI | NULL    |       |
| CUSTOMER_NAME | varchar(255) | NO   |     | NULL    |       |
| CITY          | varchar(255) | NO   |     | NULL    |       |
| GRADE         | int          | NO   |     | NULL    |       |
| SALESMAN_ID   | int          | YES  | MUL | NULL    |       |
+---------------+--------------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM CUSTOMER;
+-------------+----------------+------------+-------+-------------+
| CUSTOMER_ID | CUSTOMER_NAME  | CITY       | GRADE | SALESMAN_ID |
+-------------+----------------+------------+-------+-------------+
|        3002 | NICK RIMANDO   | NEW YORK   |   100 |        5001 |
|        3004 | FABIAN JOHNSON | PARIS      |   300 |        5006 |
|        3005 | GRAHAM ZUSI    | CALIFORNIA |   200 |        5002 |
|        3007 | BRAD DAVIS     | NEW YORK   |   200 |        5001 |
|        3008 | JULIAN GREEN   | LONDON     |   300 |        5002 |
|        3009 | GEOFF CAMERON  | BERLIN     |   100 |        5003 |
+-------------+----------------+------------+-------+-------------+
6 rows in set (0.00 sec)
```

➔ Join operations

```
mysql> SELECT CUSTOMER.CUSTOMER_NAME,
    -> CUSTOMER.CITY,
    -> SALESMAN.SALESMAN_NAME AS SALESMAN_NAME,
    -> SALESMAN.COMMISSION AS COMMISSION
    -> FROM CUSTOMER
    -> RIGHT JOIN SALESMAN
    -> ON CUSTOMER.SALESMAN_ID=SALESMAN.SALESMAN_ID;
+-----------------+------------+---------------+------------+
| CUSTOMER_NAME   | CITY       | SALESMAN_NAME | COMMISSION |
+-----------------+------------+---------------+------------+
| NICK RIMANDO    | NEW YORK   | JAMES HOOG    |       0.15 |
| BRAD DAVIS      | NEW YORK   | JAMES HOOG    |       0.15 |
| GRAHAM ZUSI     | CALIFORNIA | NAIL KNITE    |       0.13 |
| JULIAN GREEN    | LONDON     | NAIL KNITE    |       0.13 |
| GEOFF CAMERON   | BERLIN     | LAUSON HEN    |       0.12 |
| NULL            | NULL       | PIT ALEX      |       0.11 |
| FABIAN JOHNSON  | PARIS      | MC LYON       |       0.14 |
| NULL            | NULL       | PAUL ADAM     |       0.13 |
+-----------------+------------+---------------+------------+
8 rows in set (0.00 sec)
```