AddressBook Problem

**UC1 :**

**Query to create database**

mysql> create database Address\_Book;

Query OK, 1 row affected (0.02 sec)

**UC2 :**

**Query to create table with attributes**

mysql> CREATE TABLE Address\_Book

-> (

-> firstName VARCHAR(150) NOT NULL,

-> lastName VARCHAR(150) NOT NULL,

-> address VARCHAR(150) NOT NULL,

-> city VARCHAR(150) NOT NULL,

-> state VARCHAR(150) NOT NULL,

-> zip INT(6) unsigned NOT NULL,

-> phoneNumber INT(10) unsigned NOT NULL,

-> email VARCHAR(150) NOT NULL

-> );

Query OK, 0 rows affected, 2 warnings (0.09 sec)

**UC3:**

**Query to add details into table**

mysql> INSERT INTO Address\_Book ( firstName, lastName, address, city, state, zip, phoneNumber, email) VALUES

-> ('Kelly', 'Kapowski', '16 Scranton Ave', 'Scranton', 'PA', 18503, 800555555, 'kelly.kapowski@gmail.com'),

-> ('Jesse', 'Spano', '25 First Streat', 'Cambridge', 'MA', 21430, 888427768, 'jesse.spano@hotmail.com');

Query OK, 2 rows affected (0.00 sec)

Records: 2 Duplicates: 0 Warnings: 0

mysql> SELECT \* FROM Address\_Book;

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

| firstName | lastName | address | city | state | zip | phoneNumber | email |

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

| Kelly | Kapowski | 16 Scranton Ave | Scranton | PA | 18503 | 800555555 | kelly.kapowski@gmail.com |

| Jesse | Spano | 25 First Streat | Cambridge | MA | 21430 | 888427768 | jesse.spano@hotmail.com |

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

2 rows in set (0.00 sec)

**UC4:**

**Query to edit existing contact details using name**

mysql> update Address\_Book set address = '10 Streat' where firstName = 'Jesse';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT \* FROM Address\_Book;

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

| firstName | lastName | address | city | state | zip | phoneNumber | email |

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

| Kelly | Kapowski | 16 Scranton Ave | Scranton | PA | 18503 | 800555555 | kelly.kapowski@gmail.com |

| Jesse | Spano | 10 Streat | Cambridge | MA | 21430 | 888427768 | jesse.spano@hotmail.com |

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

2 rows in set (0.01 sec)

**UC5:**

**Query to delete contact using persons name**

mysql> DELETE FROM Address\_Book where firstName = 'Jesse';

Query OK, 1 row affected (0.01 sec)

mysql> SELECT \* FROM Address\_Book;

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

| firstName | lastName | address | city | state | zip | phoneNumber | email |

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

| Kelly | Kapowski | 16 Scranton Ave | Scranton | PA | 18503 | 800555555 | kelly.kapowski@gmail.com |

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

1 row in set (0.00 sec)

**UC6:**

**Query to retrieve person belonging to particular city or state**

mysql> SELECT \* FROM address\_book;

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

| firstName | lastName | address | city | state | zip | phoneNumber | email | type |

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

| Kelly | Kapowski | 16 Scranton Ave | Scranton | PA | 18503 | 800555555 | kelly.kapowski@gmail.com | Family |

| Lisa | Turtle | 2164 Garden Brook Dr | Farmers Branch | TX | 68430 | 852427768 | lisaturle@gmail.com | Friedns |

| Zach | Moris | 25 First Streat | Cambridge | MA | 21430 | 888427768 | zack.moris@hotmail.com | Family |

| Albert | Slater | 10 First Streat | Cambridge | MA | 21430 | 215842776 | albert@gmail.com | Profession |

| Samuel | Powers | 10 First Streat | Farmers Branch | TX | 68430 | 215842776 | samuel.powers@hotmail.com | Profession |

| Lisa | Turtle | 2164 Garden Brook Dr | Farmers Branch | TX | 68430 | 852427768 | lisaturle@gmail.com | Family |

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

6 rows in set (0.00 sec)

mysql> SELECT \* FROM address\_book where city = 'Cambridge';

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

| firstName | lastName | address | city | state | zip | phoneNumber | email | type |

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

| Zach | Moris | 25 First Streat | Cambridge | MA | 21430 | 888427768 | zack.moris@hotmail.com | Family |

| Albert | Slater | 10 First Streat | Cambridge | MA | 21430 | 215842776 | albert@gmail.com | Profession |

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

2 rows in set (0.00 sec)

mysql> SELECT \* FROM address\_book where state = 'TX';

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

| firstName | lastName | address | city | state | zip | phoneNumber | email | type |

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

| Lisa | Turtle | 2164 Garden Brook Dr | Farmers Branch | TX | 68430 | 852427768 | lisaturle@gmail.com | Friedns |

| Samuel | Powers | 10 First Streat | Farmers Branch | TX | 68430 | 215842776 | samuel.powers@hotmail.com | Profession |

| Lisa | Turtle | 2164 Garden Brook Dr | Farmers Branch | TX | 68430 | 852427768 | lisaturle@gmail.com | Family |

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

3 rows in set (0.00 sec)

**UC7:**

**Query to understand the size of address book by city or state**

mysql> SELECT \* FROM Address\_Book;

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

| firstName | lastName | address | city | state | zip | phoneNumber | email |

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

| Kelly | Kapowski | 16 Scranton Ave | Scranton | PA | 18503 | 800555555 | kelly.kapowski@gmail.com |

| Lisa | Turtle | 2164 Garden Brook Dr | Farmers Branch | TX | 68430 | 852427768 | lisaturle@gmail.com |

| Zach | Moris | 25 First Streat | Cambridge | MA | 21430 | 888427768 | zack.moris@hotmail.com |

| Albert | Slater | 10 First Streat | Cambridge | MA | 21430 | 215842776 | albert@gmail.com |

| Samuel | Powers | 10 First Streat | Farmers Branch | TX | 68430 | 215842776 | samuel.powers@hotmail.com |

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

mysql> SELECT COUNT(city) FROM address\_book;

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

| COUNT(city) |

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

| 6 |

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

1 row in set (0.01 sec)

mysql> SELECT COUNT(state) FROM address\_book;

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

| COUNT(state) |

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

| 6 |

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

1 row in set (0.00 sec)

mysql> SELECT COUNT(city), COUNT(state) FROM address\_book;

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

| COUNT(city) | COUNT(state) |

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

| 6 | 6 |

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

1 row in set (0.00 sec)

mysql> SELECT COUNT(firstName) FROM Address\_Book where city = 'Farmers Branch';

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

| COUNT(firstName) |

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

| 2 |

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

1 row in set (0.00 sec)

mysql> SELECT COUNT(firstName) FROM Address\_Book where state = 'PA';

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

| COUNT(firstName) |

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

| 1 |

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

1 row in set (0.00 sec)

**UC8:**

**Query to sorted address book by city alphabetically**

mysql> SELECT firstName FROM address\_book order by city ASC;

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

| firstName |

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

| Zach |

| Albert |

| Lisa |

| Samuel |

| Lisa |

| Kelly |

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

6 rows in set (0.00 sec)

mysql> SELECT \* from Address\_Book ORDER BY city ASC;

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

| firstName | lastName | address | city | state | zip | phoneNumber | email |

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

| Zach | Moris | 25 First Streat | Cambridge | MA | 21430 | 888427768 | zack.moris@hotmail.com |

| Albert | Slater | 10 First Streat | Cambridge | MA | 21430 | 215842776 | albert@gmail.com |

| Lisa | Turtle | 2164 Garden Brook Dr | Farmers Branch | TX | 68430 | 852427768 | lisaturle@gmail.com |

| Samuel | Powers | 10 First Streat | Farmers Branch | TX | 68430 | 215842776 | samuel.powers@hotmail.com |

| Kelly | Kapowski | 16 Scranton Ave | Scranton | PA | 18503 | 800555555 | kelly.kapowski@gmail.com |

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

5 rows in set (0.00 sec)

**UC9:**

**Query to add type field in the Address\_Book Table**

mysql> ALTER TABLE Address\_Book ADD type VARCHAR(150) AFTER email;

Query OK, 0 rows affected (0.05 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> SELECT \* FROM Address\_Book;

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

| firstName | lastName | address | city | state | zip | phoneNumber | email | type |

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

| Kelly | Kapowski | 16 Scranton Ave | Scranton | PA | 18503 | 800555555 | kelly.kapowski@gmail.com | NULL |

| Lisa | Turtle | 2164 Garden Brook Dr | Farmers Branch | TX | 68430 | 852427768 | lisaturle@gmail.com | NULL |

| Zach | Moris | 25 First Streat | Cambridge | MA | 21430 | 888427768 | zack.moris@hotmail.com | NULL |

| Albert | Slater | 10 First Streat | Cambridge | MA | 21430 | 215842776 | albert@gmail.com | NULL |

| Samuel | Powers | 10 First Streat | Farmers Branch | TX | 68430 | 215842776 | samuel.powers@hotmail.com | NULL |

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

5 rows in set (0.00 sec)

mysql> update Address\_Book set type = 'Family' where firstName = 'Kelly' or firstName = 'Zach';

Query OK, 2 rows affected (0.01 sec)

Rows matched: 2 Changed: 2 Warnings: 0

mysql> update Address\_Book set type = 'Friedns' where firstName = 'Lisa';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update Address\_Book set type = 'Profession' where firstName = 'Albert' or firstName = 'Samuel';

Query OK, 2 rows affected (0.01 sec)

Rows matched: 2 Changed: 2 Warnings: 0

mysql> SELECT \* FROM Address\_Book;

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

| firstName | lastName | address | city | state | zip | phoneNumber | email | type |

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

| Kelly | Kapowski | 16 Scranton Ave | Scranton | PA | 18503 | 800555555 | kelly.kapowski@gmail.com | Family |

| Lisa | Turtle | 2164 Garden Brook Dr | Farmers Branch | TX | 68430 | 852427768 | lisaturle@gmail.com | Friedns |

| Zach | Moris | 25 First Streat | Cambridge | MA | 21430 | 888427768 | zack.moris@hotmail.com | Family |

| Albert | Slater | 10 First Streat | Cambridge | MA | 21430 | 215842776 | albert@gmail.com | Profession |

| Samuel | Powers | 10 First Streat | Farmers Branch | TX | 68430 | 215842776 | samuel.powers@hotmail.com | Profession |

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

5 rows in set (0.00 sec)

**UC10:**

**Query to get number of persons count by type**

mysql> SELECT type, COUNT(\*) FROM address\_book GROUP BY type;

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

| type | COUNT(\*) |

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

| Family | 3 |

| Friedns | 1 |

| Profession | 2 |

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

3 rows in set (0.01 sec)

mysql> SELECT COUNT(firstName) FROM Address\_Book where type = 'Family';

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

| COUNT(firstName) |

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

| 2 |

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

1 row in set (0.00 sec)

mysql> SELECT COUNT(firstName) FROM Address\_Book where type = 'Friedns';

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

| COUNT(firstName) |

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

| 1 |

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

1 row in set (0.00 sec)

mysql> SELECT COUNT(firstName) FROM Address\_Book where type = 'Profession';

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

| COUNT(firstName) |

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

| 2 |

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

1 row in set (0.00 sec)

**UC11:**

**Query to add a person to both family and friends**

mysql> INSERT INTO Address\_Book ( firstName, lastName, address, city, state, zip, phoneNumber, email, type) VALUES

-> ('Lisa', 'Turtle', '2164 Garden Brook Dr', 'Farmers Branch', 'TX', 68430, 852427768, 'lisaturle@gmail.com', 'Family');

Query OK, 1 row affected (0.01 sec)

mysql> SELECT \* FROM Address\_Book;

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

| firstName | lastName | address | city | state | zip | phoneNumber | email | type |

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

| Kelly | Kapowski | 16 Scranton Ave | Scranton | PA | 18503 | 800555555 | kelly.kapowski@gmail.com | Family |

| Lisa | Turtle | 2164 Garden Brook Dr | Farmers Branch | TX | 68430 | 852427768 | lisaturle@gmail.com | Friedns |

| Zach | Moris | 25 First Streat | Cambridge | MA | 21430 | 888427768 | zack.moris@hotmail.com | Family |

| Albert | Slater | 10 First Streat | Cambridge | MA | 21430 | 215842776 | albert@gmail.com | Profession |

| Samuel | Powers | 10 First Streat | Farmers Branch | TX | 68430 | 215842776 | samuel.powers@hotmail.com | Profession |

| Lisa | Turtle | 2164 Garden Brook Dr | Farmers Branch | TX | 68430 | 852427768 | lisaturle@gmail.com | Family |

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

6 rows in set (0.00 sec)

**UC 12:**

**Draw ER Diagram**

Type

Emp start date

Zip

Add. Name

Emp Address

Add.

ID

Emp Name

Emp ID

Address Book

Contact

Address

Type-Contact

One to Many

Many to One

One to One

Address

**UC 13:**

**Query to implement ER diagram for address book**

mysql> CREATE TABLE type (

-> typeID INT unsigned NOT NULL AUTO\_INCREMENT,

-> type VARCHAR(150) NOT NULL,

-> contId INT NOT NULL,

-> PRIMARY KEY (typeID),

-> FOREIGN KEY (contId) REFERENCES Address\_Book(srNo)

-> );

Query OK, 0 rows affected (0.07 sec)

mysql> INSERT INTO type (typeID, type, contId) VALUES

-> (1, 'Friends', 5),

-> (2, 'Family', 5);

Query OK, 2 rows affected (0.01 sec)

Records: 2 Duplicates: 0 Warnings: 0

mysql> SELECT \* FROM type;

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

| typeID | type | contId |

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

| 1 | Friends | 5 |

| 2 | Family | 5 |

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

2 rows in set (0.00 sec)