Login

Sudo mysql -u root -p Simplilearn

Sudo mysql -h Ipaddress -u root -p Simplilearn(to login db from different machine)

Ctrl +D to exit mysql terminal

Dounload link <https://dev.mysql.com/downloads/file/?id=520510>

Clear to clear screen

Create database databasename

Use dbname (to switch to particular DB)

Show tables

**CREATE TABLE Users(username varchar(80), password varchar(12), age int );**

Describe Users;

INSERT INTO Users values('abc', '56##', 45);

Select \* from Users;

**PROBLEM: How will your delete an existing column from a table**

**ALTER TABLE Users DROP COLUMN CITY;**

**DROP TABLE Users; // BE CAUTIOUS, all data will be lost!**

**CREATE TABLE Product (PRODUCT\_ID int AUTO\_INCREMENT PRIMARY KEY, PRODUCT\_NAME varchar(80));**

**INSERT INTO Product(PRODUCT\_NAME) VALUES('Samsung Mobile');**

**INSERT INTO Product(PRODUCT\_NAME) VALUES('IPhone Mobile');**

**mysql> SELECT \* FROM Product;**

**+------------+----------------+**

**| PRODUCT\_ID | PRODUCT\_NAME   |**

**+------------+----------------+**

**|          1 | Samsung Mobile |**

**|          2 | IPhone Mobile  |**

**+------------+----------------+**

**2 rows in set (0.00 sec)**

**CREATING USERS**

**CREATE USER 'user1'@'localhost' IDENTIFIED BY <password>**

**OR**

**CREATE USER user1 IDENTIFIED BY <password>**

**CREATE USER 'user1' IDENTIFIED BY 'Pass1\*\*\*^^%';**

**GRANT ALL PRIVILEGES ON \*.\* TO 'user1';**

**OR**

**GRANT SELECT, INSERT ON \*.\* TO 'user1';**

**NOTE: The first start in \*.\* above refers to the database and second refers to the objects(tables, SP, triggers, views..) in the database.**

**GRANT ALL PRIVILEGES ON estore.Product TO 'user1';**

**GRANT ALL PRIVILEGES ON estore.\* TO 'user1';**

**NOTE: The first start in \*.\* above refers to the database and second refers to the objects(tables, SP, triggers, views..) in the database.**

**GRANT ALL PRIVILEGES ON estore.Product TO 'user1';**

**GRANT ALL PRIVILEGES ON estore.\* TO 'user1';**

**CREATE TABLE UsersDB(username varchar(80) UNIQUE, password varchar(12), age int );**

**INSERT INTO UsersDB values('Z22', '888dff8RR6##', 68);**

**COMPOSITE KEYS**

**No 2 manc can having same product name registred in a given city/country**

**CREATE TABLE PRODUCT(**

**Product\_name varchar(80) ,**

**City\_of\_manc varchar(80) ,**

**PRIMARY KEY (Product\_name , City\_of\_manc)**

**);**

**FORIEGN KEY**

**CREATE TABLE Customer( CID int PRIMARY Key AUTO\_INCREMENT, name varchar(256),phone varchar(20),email varchar(256));**

**INSERT INTO Customer values(null, 'John', '90900 11111','john@example.com');**

**INSERT INTO Customer values(null, 'Jagat', '9668781111','jagga@example.com');**

**INSERT INTO Customer values(null, 'Jane', '9356365331','jane@example.com');**

**SELECT \* FROM Customer;**

**CREATE TABLE Address (**

**AddressID INT PRIMARY KEY AUTO\_INCREMENT,**

**Lane VARCHAR(255) NOT NULL,**

**City VARCHAR(255) NOT NULL,**

**Pincode VARCHAR(10) NOT NULL,**

**CustomerID INT,**

**CONSTRAINT FK\_Customer\_Address FOREIGN KEY (CustomerID) REFERENCES Customer(CID)**

**);**

**INSERT INTO Address(null, 'Z144 Redwood Shores', 'Bangalore', '520001', 1);**

**INSERT INTO Address(null, 'PAL544 Bevery Tank', 'Kolkota', '320001', 2);**

**INSERT INTO Address(null, 'SOR2 Shalimar Regal', 'Noida', '145045', 3);**

**mysql> Select \* from Address;**

**+-----------+---------------------+-----------+---------+------------+**

**| AddressID | Lane                | City      | Pincode | CustomerID |**

**+-----------+---------------------+-----------+---------+------------+**

**|         1 | Z144 Redwood Shores | Bangalore | 520001  |          1 |**

**|         2 | PAL544 Bevery Tank  | Kolkota   | 320001  |          2 |**

**|         3 | SOR2 Shalimar Regal | Noida     | 145045  |          3 |**

**+-----------+---------------------+-----------+---------+------------+**

**3 rows in set (0.00 sec)**

**mysql> SELECT \* FROM Customer;**

**+-----+-------+-------------+-------------------+**

**| CID | name  | phone       | email**

**+-----+-------+-------------+-------------------+**

**|   1 | John  | 90900 11111 | john@example.com  |**

**|   2 | Jagat | 9668781111  | jagga@example.com |**

**|   3 | Jane  | 9356365331  | jane@example.com  |**

**+-----+-------+-------------+-------------------+**

**3 rows in set (0.00 sec)**

**mysql> INSERT INTO Address VALUES(null, 'Prestige gardens', 'Berlin', '145045', 30);**

**ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails (`estore`.`Address`, CONSTRAINT `Address\_ibfk\_1` FOREIGN KEY (`CustomerID`) REFERENCES `Customer` (`CID`))**

**mysql> DELETE FROM Customer where CID=3;**

**ERROR 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails (`estore`.`Address`, CONSTRAINT `Address\_ibfk\_1` FOREIGN KEY**

**Above errors ARE EXPECTED as per the Foriegn Key policy!**

**CHECKING CONSTRAINT/DEPENDENCIES DEFINITION**

**SELECT**

**CONSTRAINT\_NAME,**

**TABLE\_NAME,**

**COLUMN\_NAME,**

**REFERENCED\_TABLE\_NAME,**

**REFERENCED\_COLUMN\_NAME**

**FROM**

**INFORMATION\_SCHEMA.KEY\_COLUMN\_USAGE**

**WHERE**

**REFERENCED\_TABLE\_NAME = 'Customer'**

**AND TABLE\_NAME = 'Address';**

sudo apt install mysql -workbench

**JOINS**

**JOINS**

**-- CREATE DATABASE JOINS\_DEMODB;**

**-- USE JOINS\_DEMODB;**

**-- CREATE TABLE Customer( CID int PRIMARY Key AUTO\_INCREMENT, name varchar(256),phone varchar(20),email varchar(256));**

**-- INSERT INTO Customer values(null, 'John', '90900 11111','john@example.com');**

**-- INSERT INTO Customer values(null, 'Jagat', '9668781111','jagga@example.com');**

**-- INSERT INTO Customer values(null, 'Jane', '9356365331','jane@example.com');**

**-- SELECT \* FROM Customer;**

**USE JOINS\_DEMODB;**

**CREATE TABLE Orders(**

**OrderID INT PRIMARY KEY AUTO\_INCREMENT,**

**Amount int NOT NULL,**

**CustomerID INT,**

**FOREIGN KEY (CustomerID) REFERENCES Customer(CID)**

**);**

**USE JOINS\_DEMODB;**

**INSERT into Orders (Amount, CustomerID) Values (120, 1);**

**INSERT into Orders (Amount, CustomerID) Values (150, 1);**

**INSERT into Orders (Amount, CustomerID) Values (160, 2);**

**INSERT into Orders (Amount, CustomerID) Values (90, 3);**

**Select CID, Customer.name, Orders.AMOUNT from Customer INNER JOIN Orders on Customer.CID=Orders.CustomerID;**

**LEFT JOIN**

**Select CID, Customer.name, Orders.AMOUNT from Customer LEFT JOIN Orders on Customer.CID=Orders.CustomerID;**

**Select CID, Customer.name, Orders.AMOUNT from Customer LEFT JOIN Orders on Customer.CID=Orders.CustomerID;**

**+-----+-------+--------+**

**| CID | name  | AMOUNT |**

**+-----+-------+--------+**

**|   1 | John  |    120 |**

**|   1 | John  |    150 |**

**|   1 | John  |    120 |**

**|   1 | John  |    150 |**

**|   2 | Jagat |    160 |**

**|   2 | Jagat |    160 |**

**|   3 | Jane  |     90 |**

**|   3 | Jane  |     90 |**

**|   4 | John  |   NULL |**

**|   5 | Jagat |   NULL |**

**|   6 | Jane  |   NULL |**

**+-----+-------+--------+**

**11 rows in set (0.00 sec)**

**RIGHT JOIN**

**Select OrderID, Customer.name, Orders.AMOUNT from Customer RIGHT JOIN Orders on Customer.CID=Orders.CustomerID;**

**RIGHT JOIN**

**Select OrderID, Customer.name, Orders.AMOUNT from Customer RIGHT JOIN Orders on Customer.CID=Orders.CustomerID;**

**Select OrderID, Customer.name, Orders.AMOUNT from Customer OUTER JOIN Orders on Customer.CID=Orders.CustomerID;**

**Select Orders.OrderID, Customer.name, Orders.AMOUNT from Customer FULL JOIN Orders on Customer.CID=Orders.CustomerID;**

**SELF JOIN**

**Select E1.EmpID, E1.name, E2.name from Employees E1, Employees E2 where E1. ManagerID = E2. EmpID;**

**DELETE FROM TABLE WHERE age>50;**

**DROP**