**MySQL**

**I. Trial Download**

go to https://www.mysql.com/downloads/

click on Trial Download (need to create an account)

**II. Reference**

Ramez Elmasri and Shamkant B. Navathe, Fundamentals of Database Systems, sixth Edition, 2011.

**III. Create a Database Company**

**III.1 Creating a Database**

mysql> CREATE DATABASE Company;

mysql> Use Company;

mysql> Show Databases;

**III.2 Create a Table**
mysql> Create Table EMPLOYEE (Fname VARCHAR(15)   NOT NULL, Minit CHAR,  Lname VARCHAR(15) NOT NULL, Ssn CHAR(9) NOT NULL, Bdate DATE, Address VARCHAR(30), Sex CHAR, Salary DECIMAL(10,2), Super_ssn CHAR(9), Dno INT NOT NULL, PRIMARY KEY (Ssn));


mysql> Create table DEPARTMENT (Dname VARCHAR(15) NOT NULL, Dnumber INT NOT NULL, Mgr_ssn CHAR(9) NOT NULL, Mgr_start_date DATE, PRIMARY KEY (Dnumber), UNIQUE (Dname));


mysql> Show Tables;

**III.3 Insert Values into a Table**
mysql> insert into employee (Fname, Minit, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno) values ('John', 'B', 'Smith', 123456789, '1965-01-09', '731 Fondren, Houston, TX', 'M', 30000, 333445555, 5);

mysql> insert into employee (Fname, Minit, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno) values ('Franklin', 'T', 'Wong', 333445555, '1955-12-08', '638 Voss, Houston, TX', 'M', 40000, 888665555, 5);

mysql> insert into employee (Fname, Minit, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno) values ('Alicia', 'J', 'Zelaya', 999887777, '1968-01-19', '3321 Castle, Spring, TX', 'F', 25000, 987654321, 4);

mysql> insert into employee (Fname, Minit, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno) values ('Jennifer', 'S', 'Wallace', 987654321, '1941-06-20', '291 Berry, Bellaire, TX', 'F', 43000, 888665555, 4);

mysql> insert into employee (Fname, Minit, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno) values ('Ramesh', 'K', 'Narayan', 666884444, '1962-09-15', '975 Fire Oak, Houston, TX', 'M', 38000, 333445555, 5);

mysql> insert into employee (Fname, Minit, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno) values ('Joyce', 'A', 'English', 453453453, '1972-07-31', '5631 Rice, Houston, TX', 'F', 25000, 333445555, 5);

mysql> insert into employee (Fname, Minit, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno) values ('Ahmad', 'V', 'Jabbar', 987987987, '1969-03-29', '980 Dallas, Houston, TX', 'M', 25000, 987654321, 4);

mysql> insert into employee (Fname, Minit, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno) values ('James', 'E', 'Borg', 888665555, '1937-11-10', '450 Stone, Houston, TX', 'M', 55000, NULL, 1);

mysql> insert into department (Dname, Dnumber, Mgr_ssn, Mgr_start_date) values ('Research', 5, '333445555', '1988-05-22');

mysql> insert into department (Dname, Dnumber, Mgr_ssn, Mgr_start_date) values ('Administration', 4, '987654321', '1995-01-01');

mysql> insert into department (Dname, Dnumber, Mgr_ssn, Mgr_start_date) values ('Headquarters', 1, '888665555', '1981-06-19');

**III.4 Retrieves Rows Selected from One or More Tables**
mysql> select * from employee;

| Fname | Minit | Lname | Ssn | Bdate | Address | Sex | Salary | Super_ssn | Dno |
|-------|-------|-------|-----|-------|---------|-----|--------|-----------|-----|
| John | B | Smith | 123456789 | 1965-01-09 | 731 Fondren, Houston, TX | M | 30000.00 | 333445555 | 5 |
| Franklin | T | Wong | 333445555 | 1955-12-08 | 638 Voss, Houston, TX | M | 40000.00 | 888665555 | 5 |
| Joyce | A | English | 453453453 | 1972-07-31 | 5631 Rice, Houston, TX | F | 25000.00 | 333445555 | 5 |
| Ramesh | K | Narayan | 666884444 | 1962-09-15 | 975 Fire Oak, Houston, TX | M | 38000.00 | 333445555 | 5 |
| James | E | Borg | 888665555 | 1937-11-10 | 450 Stone, Houston, TX | M | 55000.00 | NULL | 1 |

```
| Jennifer | S       | Wallace | 987654321 | 1941-06-20 | 291 Berry,
Bellaire, TX   | F     | 43000.00 | 888665555 |   4 |
| Ahmad    | V       | Jabbar  | 987987987 | 1969-03-29 | 980 Dallas,
Houston, TX    | M     | 25000.00 | 987654321 |   4 |
| Alicia   | J       | Zelaya  | 999887777 | 1968-01-19 | 3321 Castle,
Spring, TX     | F     | 25000.00 | 987654321 |   4 |
+----------+-------+--------+----------+-----------+--------------
-----------+------+----------+----------+-----+
```
8 rows in set (0.00 sec)

select * from department;
```
+----------------+---------+-----------+----------------+
| Dname          | Dnumber | Mgr_ssn   | Mgr_start_date |
+----------------+---------+-----------+----------------+
| Headquarters   |       1 | 888665555 | 1981-06-19     |
| Administration |       4 | 987654321 | 1995-01-01     |
| Research       |       5 | 333445555 | 1988-05-22     |
+----------------+---------+-----------+----------------+
```
3 rows in set (0.00 sec)

-End -