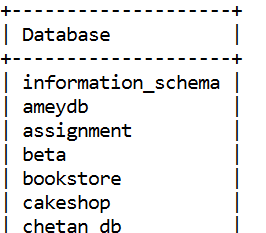
**MySQL Assignment -1 (DDL)**

**Login to MySQL and view all databases already present. You should get following result :**

****

**Ans:**

mysql> show databases;

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

| Database |

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

| 1ddl |

| 1sql |

| information\_schema |

| mysql |

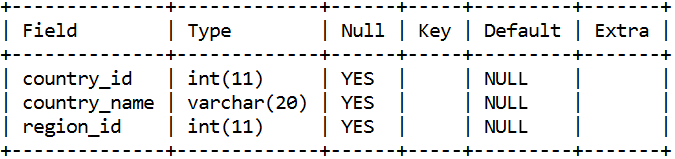
| performance\_schema |

| sys |

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

6 rows in set (0.00 sec)

**Write an SQL statement to create a simple table countries including columns country\_id,country\_name and region\_id. After this display the structure of table as below :**

****

**Ans:**

mysql> create table countries(

-> country\_id int (11),

-> country\_name varchar(20),

-> region\_id int (11));

Query OK, 0 rows affected, 2 warnings (0.12 sec)

mysql> desc countries;

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

| Field | Type | Null | Key | Default | Extra |

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

| country\_id | int | YES | | NULL | |

| country\_name | varchar(20) | YES | | NULL | |

| region\_id | int | YES | | NULL | |

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

3 rows in set (0.03 sec)

**Write an SQL statement to create a table named jobs including columns job\_id, job\_title, min\_salary, max\_salary and check whether the max\_salary amount exceeding the upper limit 25000. Also set job\_id as primary key and entering null values for job\_title is not allowed.**

**Ans:**

mysql> create table jobs(job\_id varchar(10) primary key,job\_title varchar(20) not null,min\_salary decimal(6,0),max\_salary decimal(6,0),constraint check(max\_salary<=25000));

Query OK, 0 rows affected (0.32 sec)

mysql> desc jobs;

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

| Field | Type | Null | Key | Default | Extra |

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

| job\_id | varchar(10) | NO | PRI | NULL | |

| job\_title | varchar(20) | NO | | NULL | |

| min\_salary | decimal(6,0) | YES | | NULL | |

| max\_salary | decimal(6,0) | YES | | NULL | |

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

4 rows in set (0.00 sec)

**Write a SQL statement to create a table named job\_history including columns employee\_id, start\_date, end\_date, job\_id and department\_id**

**Ans:**

mysql> create table job\_history(employee\_id decimal(6,0),start\_date date,end\_date date,job\_id varchar(10),department\_id decimal(4,0));

Query OK, 0 rows affected (0.15 sec)

mysql> desc job\_history;

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

| Field | Type | Null | Key | Default | Extra |

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

| employee\_id | decimal(6,0) | YES | | NULL | |

| start\_date | date | YES | | NULL | |

| end\_date | date | YES | | NULL | |

| job\_id | varchar(10) | YES | | NULL | |

| department\_id | decimal(4,0) | YES | | NULL | |

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

5 rows in set (0.00 sec)

**Write an SQL statement to alter a table named countries to make sure that no duplicate data against column country\_id will be allowed at the time of insertion.**

**Ans:**

mysql> alter table countries

-> modify country\_id varchar(20) unique;

Query OK, 0 rows affected (0.37 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc countries;

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

| Field | Type | Null | Key | Default | Extra |

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

| country\_id | varchar(20) | YES | UNI | NULL | |

| country\_name | varchar(20) | YES | | NULL | |

| region\_id | int | YES | | NULL | |

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

3 rows in set (0.00 sec)

**Write an SQL statement to create a table named jobs including columns job\_id, job\_title, min\_salary and max\_salary, and make sure that, the default value for job\_title is blank and min\_salary is 8000 and max\_salary is NULL will be entered automatically at the time of insertion if no value assigned for the specified columns.**

**Ans:**

mysql> create table jobs(job\_id varchar(20),job\_title varchar(20) default ' ',min\_salary decimal(6,0) default 8000,max\_salary decimal(6,0) default NULL);

Query OK, 0 rows affected (0.12 sec)

mysql> desc jobs;

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

| Field | Type | Null | Key | Default | Extra |

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

| job\_id | varchar(20) | YES | | NULL | |

| job\_title | varchar(20) | YES | | | |

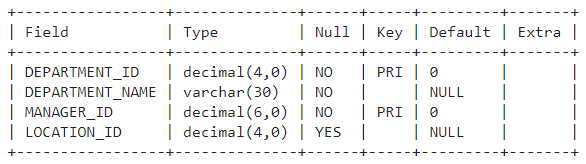
| min\_salary | decimal(6,0) | YES | | 8000 | |

| max\_salary | decimal(6,0) | YES | | NULL | |

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

4 rows in set (0.00 sec)

**Create a Department table with following structure**

****

**Ans:**

mysql> create table Department(DEPARTMENT\_ID decimal(4,0) not null default 0,DEPARTMENT\_NAME varchar(30) not null ,MANAGER\_ID decimal(6,0) not null default 0,LOCATION\_ID decimal(4,0));

Query OK, 0 rows affected (0.72 sec)

mysql> alter table department add PRIMARY KEY(DEPARTMENT\_ID,MANAGER\_ID);

Query OK, 0 rows affected (0.39 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc department;

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

| Field | Type | Null | Key | Default | Extra |

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

| DEPARTMENT\_ID | decimal(4,0) | NO | PRI | 0 | |

| DEPARTMENT\_NAME | varchar(30) | NO | | NULL | |

| MANAGER\_ID | decimal(6,0) | NO | PRI | 0 | |

| LOCATION\_ID | decimal(4,0) | YES | | NULL | |

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

4 rows in set (0.00 sec)

**Write an SQL statement to create a table employees including columns employee\_id, first\_name, last\_name, email, phone\_number hire\_date, job\_id, salary, commission, manager\_id and department\_id and make sure that, the employee\_id column does not contain any duplicate value at the time of insertion and the foreign key columns combined by department\_id and manager\_id columns contain only those unique combination values, which combinations are exists in the departments table.**

**Ans:**

mysql> create table Employees(EMPLOYEE\_ID decimal(6,0)not null PRIMARY KEY,FIRST\_NAME varchar(20)DEFAULT NULL,LAST\_NAME varchar(25)NOT NULL,EMAIL varchar(25)NOT NULL,PHONE\_NUMBER varchar(20)DEFAULT NULL,HIRE\_DATE date NOT NULL,JOB\_ID varchar(10)NOT NULL,SALARY decimal(8,2)DEFAULT NULL,COMMISION\_PCT decimal(2,2)DEFAULT NULL,MANAGER\_ID decimal(6,0)DEFAULT NULL,DEPARTMENT\_ID decimal(4,0)DEFAULT NULL,FOREIGN KEY(DEPARTMENT\_ID,MANAGER\_ID) REFERENCES department(DEPARTMENT\_ID,MANAGER\_ID));

Query OK, 0 rows affected (0.57 sec)

mysql> desc Employees;

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

| Field | Type | Null | Key | Default | Extra |

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

| EMPLOYEE\_ID | decimal(6,0) | NO | PRI | NULL | |

| FIRST\_NAME | varchar(20) | YES | | NULL | |

| LAST\_NAME | varchar(25) | NO | | NULL | |

| EMAIL | varchar(25) | NO | | NULL | |

| PHONE\_NUMBER | varchar(20) | YES | | NULL | |

| HIRE\_DATE | date | NO | | NULL | |

| JOB\_ID | varchar(10) | NO | | NULL | |

| SALARY | decimal(8,2) | YES | | NULL | |

| COMMISION\_PCT | decimal(2,2) | YES | | NULL | |

| MANAGER\_ID | decimal(6,0) | YES | | NULL | |

| DEPARTMENT\_ID | decimal(4,0) | YES | MUL | NULL | |

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

11 rows in set (0.00 sec)