

MYSQL DDL Assignment 1

Que.1. Login to MySQL and view all databases already present. You should get following result :

Ans: mysql> show databases;

Database
company
information_schema
mysql
performance_schema
sys

5 rows in set (0.07 sec)

Que.2. 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,
-> country_name VARCHAR(50),
-> region_id INT);

Query OK, 0 rows affected (0.06 sec)

mysql> desc countries;

Field	Type	Null	Key	Default	Extra
country_id	int	YES		NULL	
country_name	varchar(50)	YES		NULL	
region_id	int	YES		NULL	

3 rows in set (0.02 sec)

Que.3. 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 INT PRIMARY KEY,
-> job_title VARCHAR(50) NOT NULL,
-> min_salary INT,
-> max_salary INT CHECK (max_salary <= 25000)
->);

Query OK, 0 rows affected (0.04 sec)

mysql> desc jobs;

Field	Type	Null	Key	Default	Extra
job_id	int	NO	PRI	NULL	
job_title	varchar(50)	NO		NULL	
min_salary	int	YES		NULL	
max_salary	int	YES		NULL	

4 rows in set (0.00 sec)

Que.4. Write a SQL statement to create a table named job_histroy including columns employee_id, start_date, end_date, job_id and department_id

```
Ans: mysql> create table job_histroy(  employee_id INT,
->    start_date DATE,
->    end_date DATE,
->    job_id INT,
->    department_id INT
-> );
```

Query OK, 0 rows affected (0.04 sec)

Que.5. 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
-> ADD CONSTRAINT unique_country_id UNIQUE (country_id);
```

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

Que.6. 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 job( job_id      INT PRIMARY KEY,
->    job_title  VARCHAR(50) DEFAULT '',
->    min_salary INT DEFAULT 8000,
->    max_salary INT DEFAULT NULL);
```

Query OK, 0 rows affected (0.03 sec)

Que.7. 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) DEFAULT NULL,
->    PRIMARY KEY (department_id, manager_id)
-> );
```

Query OK, 0 rows affected (0.03 sec)

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 (0.01 sec)
```

Que.8. 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    INT NOT NULL,
->     first_name    VARCHAR(30),
->     last_name     VARCHAR(30),
->     email         VARCHAR(50),
->     phone_number  VARCHAR(20),
->     hire_date     DATE,
->     job_id        VARCHAR(10),
->     salary        DECIMAL(8,2),
->     commission    DECIMAL(4,2),
->     manager_id    DECIMAL(6,0),
->     department_id DECIMAL(4,0),
->
->     PRIMARY KEY (employee_id),
->
->     FOREIGN KEY (department_id, manager_id)
->         REFERENCES department(department_id, manager_id)
-> );
```

Query OK, 0 rows affected (0.05 sec)

```
mysql> desc employees;
```

Field	Type	Null	Key	Default	Extra
employee_id	int	NO	PRI	NULL	
first_name	varchar(30)	YES		NULL	
last_name	varchar(30)	YES		NULL	
email	varchar(50)	YES		NULL	
phone_number	varchar(20)	YES		NULL	
hire_date	date	YES		NULL	
job_id	varchar(10)	YES		NULL	
salary	decimal(8,2)	YES		NULL	
commission	decimal(4,2)	YES		NULL	
manager_id	decimal(6,0)	YES		NULL	
department_id	decimal(4,0)	YES	MUL	NULL	

```
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.00 sec)
```