

Week-2

Lab Task-1 (DDL and DML Operations) Solution

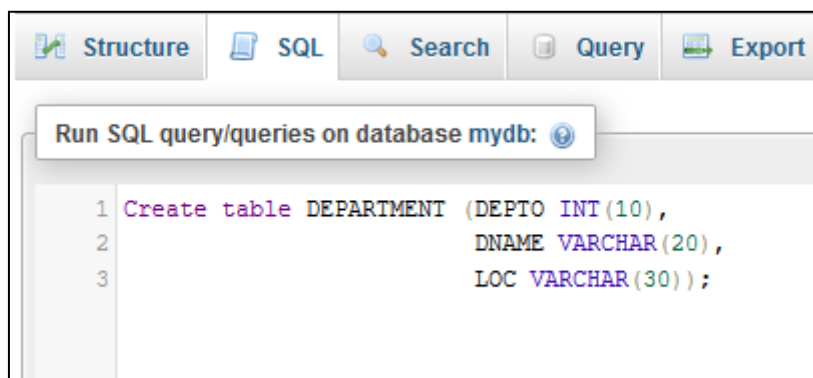
Department

DEPTNO	DNAME	LOC
10	ACCOUNTING	WANDSWORTH
20	RESEARCH	HOUNSLOW
30	SALES	CLAPHAM
40	OPERATIONS	HOUNSLOW

1. Define table "Department" and populate the table with values (given as example) using SQL.

ANS:

Creating Department table:



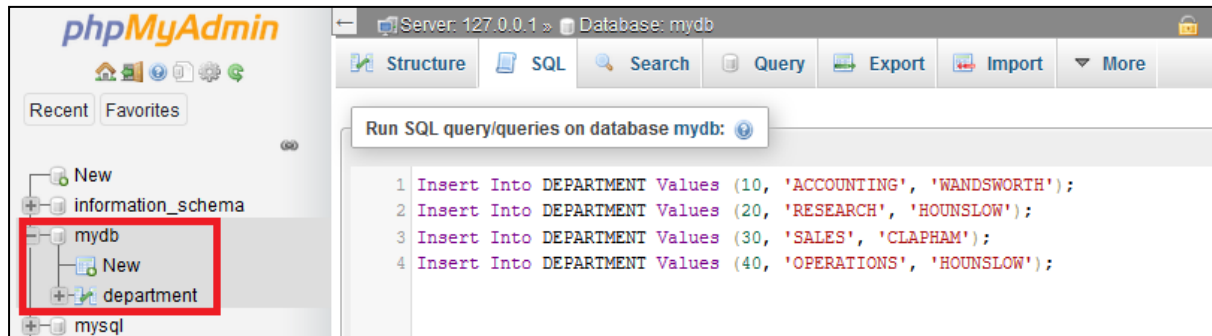
The screenshot shows a SQL IDE interface with tabs for Structure, SQL, Search, Query, and Export. A tooltip above the SQL tab reads "Run SQL query/queries on database mydb:". The SQL editor contains the following code:

```

1 Create table DEPARTMENT (DEPTO INT(10),
2                           DNAME VARCHAR(20),
3                           LOC VARCHAR(30));

```

Inserting values in the department table:



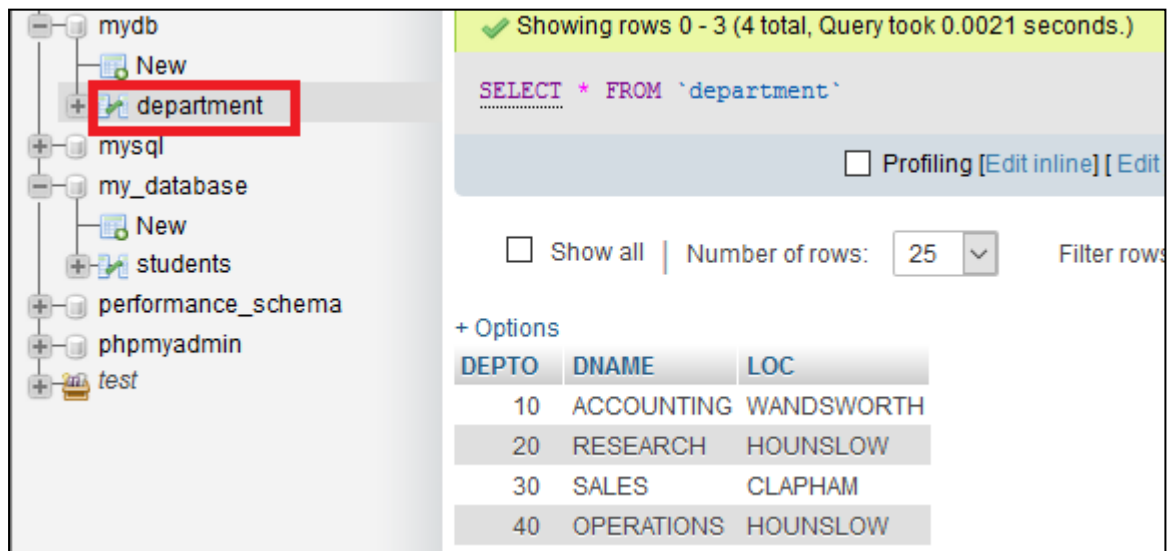
Run SQL query/queries on database mydb:

```

1 Insert Into DEPARTMENT Values (10, 'ACCOUNTING', 'WANDSWORTH');
2 Insert Into DEPARTMENT Values (20, 'RESEARCH', 'HOUNSLOW');
3 Insert Into DEPARTMENT Values (30, 'SALES', 'CLAPHAM');
4 Insert Into DEPARTMENT Values (40, 'OPERATIONS', 'HOUNSLOW');

```

The table "Department":



Showing rows 0 - 3 (4 total, Query took 0.0021 seconds.)

```
SELECT * FROM `department`
```

☐ Profiling [Edit inline] [Edit]

☐ Show all | Number of rows: 25 | Filter rows

+ Options

DEPTO	DNAME	LOC
10	ACCOUNTING	WANDSWORTH
20	RESEARCH	HOUNSLOW
30	SALES	CLAPHAM
40	OPERATIONS	HOUNSLOW

2. Find the Department numbers and department names from the table.

ANS:

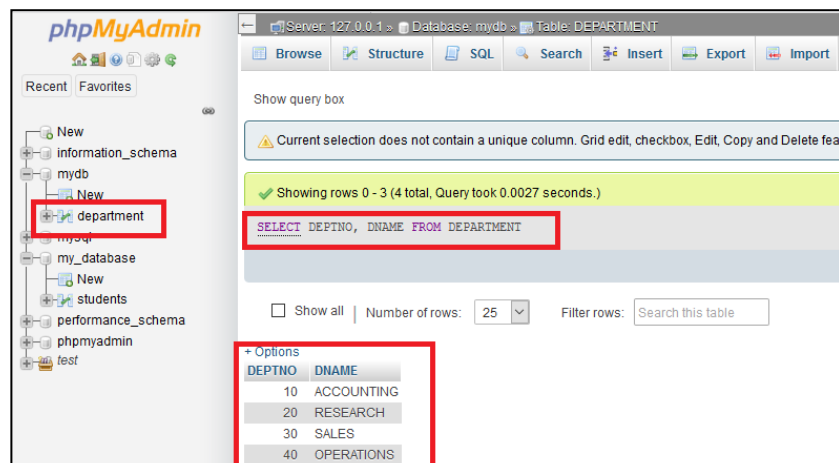


Table: DEPARTMENT

Show query box

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete feat

Showing rows 0 - 3 (4 total, Query took 0.0027 seconds.)

```
SELECT DEPTNO, DNAME FROM DEPARTMENT
```

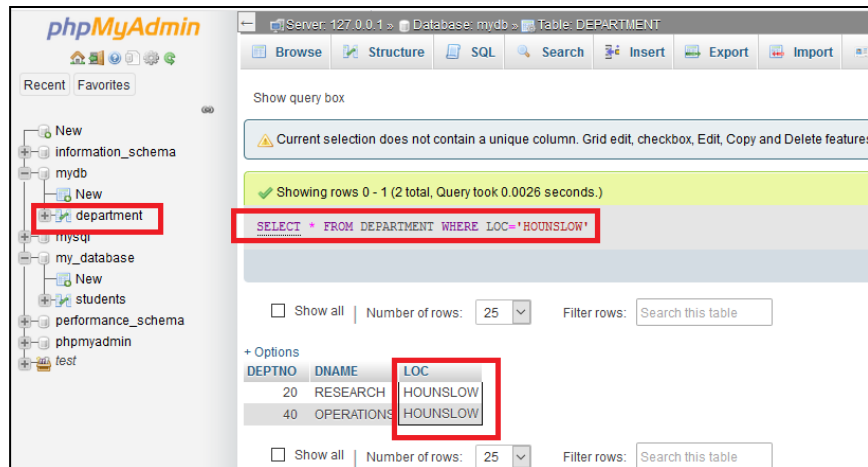
☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

DEPTNO	DNAME
10	ACCOUNTING
20	RESEARCH
30	SALES
40	OPERATIONS

3. Find all the details of the department which is in Hounslow.

ANS:

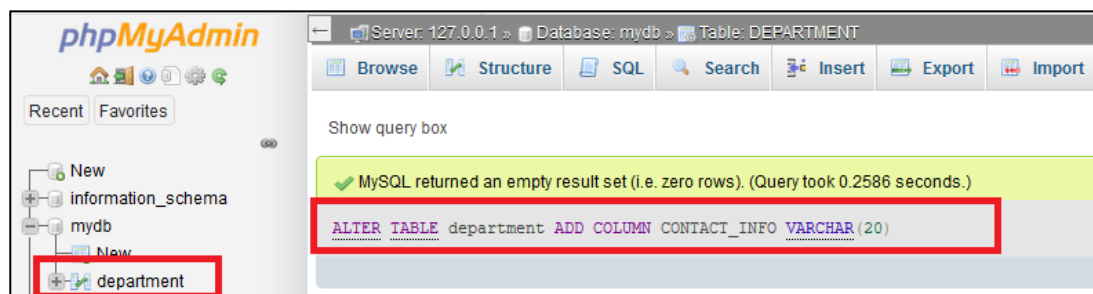


The screenshot shows the phpMyAdmin interface. On the left, the database structure tree is visible, with 'mydb' selected and 'department' highlighted. The main panel shows the 'DEPARTMENT' table structure with columns: DEPTNO, DNAME, and LOC. A query is entered in the SQL tab: `SELECT * FROM DEPARTMENT WHERE LOC='HOUNSLOW'`. The results show two rows: (20, RESEARCH, HOUNSLOW) and (40, OPERATIONS, HOUNSLOW).

DEPTNO	DNAME	LOC
20	RESEARCH	HOUNSLOW
40	OPERATIONS	HOUNSLOW

4. How can you add another attribute to the table to store the contact number of the departments?

ANS:



The screenshot shows the phpMyAdmin interface. The 'department' table is selected. The SQL tab contains the query: `ALTER TABLE department ADD COLUMN CONTACT_INFO VARCHAR(20)`. The message below the query states: 'MySQL returned an empty result set (i.e. zero rows). (Query took 0.2586 seconds.)'

5. In this existing table “Department” you have to store contact numbers for each of the department.

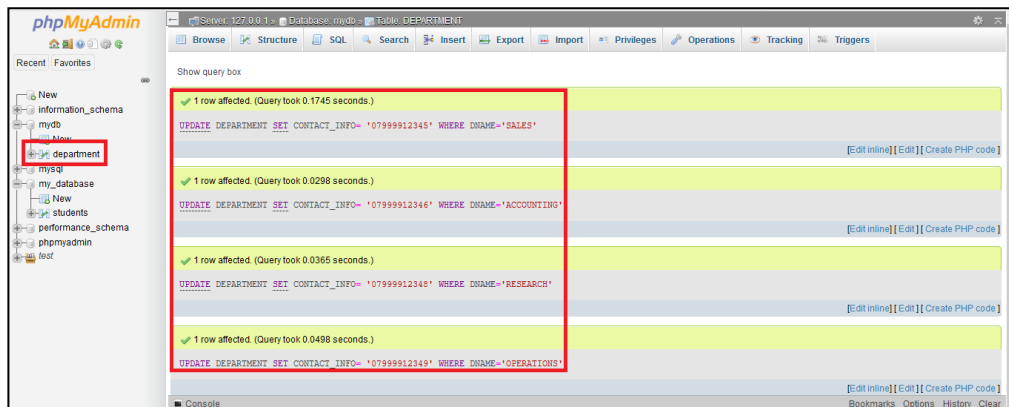
Department of Sales: 07999912345

Department of Accounting: 07999912346

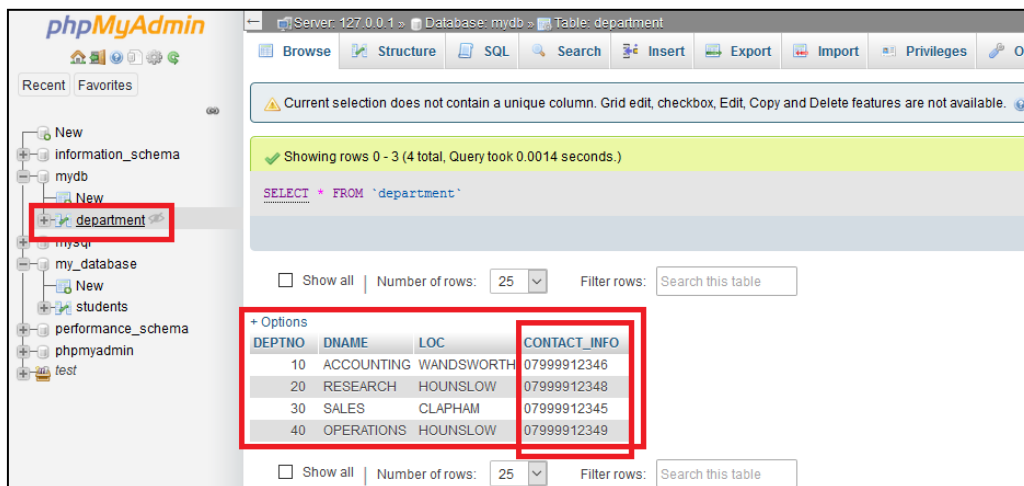
Department of Research: 07999912348

Department of Operations: 07999912349

ANS:

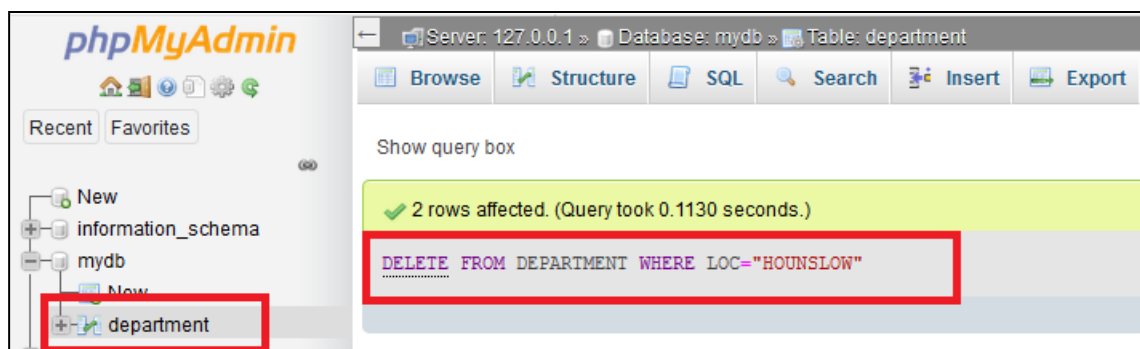


The update “Department” table looks like:

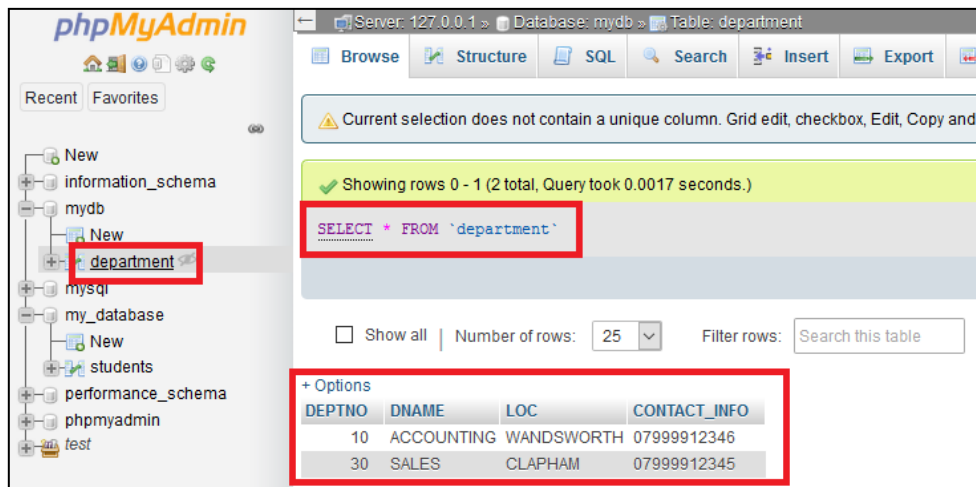


6. Delete all the information of the department where the location is “Hounsflow”.

ANS:



Finally, there is no data is there where the location of the department(s) was in Hounslow:



Server: 127.0.0.1 » Database: mydb » Table: department

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Paste are disabled.

Showing rows 0 - 1 (2 total, Query took 0.0017 seconds.)

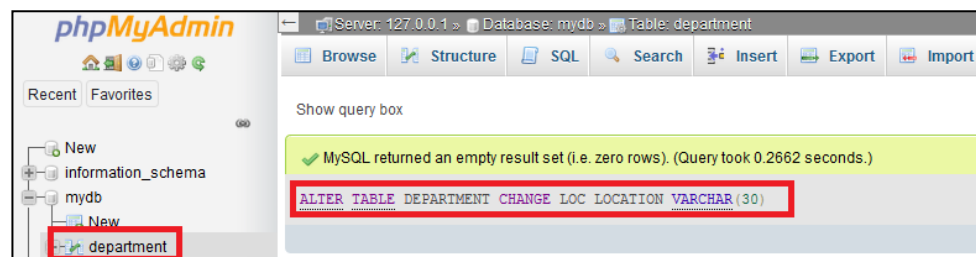
`SELECT * FROM `department``

Options

DEPTNO	DNAME	LOC	CONTACT_INFO
10	ACCOUNTING	WANDSWORTH	07999912346
30	SALES	CLAPHAM	07999912345

7. How can you change the attribute “LOC” to be presented as “LOCATIONS”.

ANS:



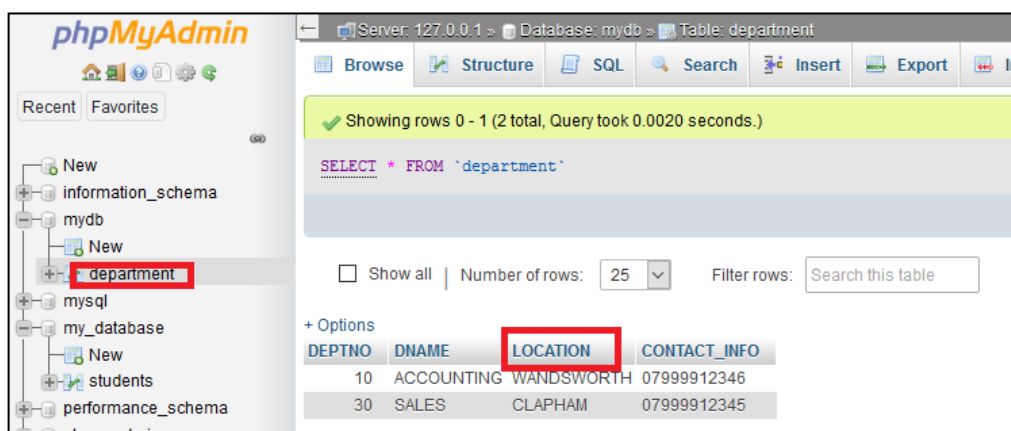
Server: 127.0.0.1 » Database: mydb » Table: department

Show query box

MySQL returned an empty result set (i.e. zero rows). (Query took 0.2662 seconds.)

`ALTER TABLE DEPARTMENT CHANGE LOC LOCATION VARCHAR (30)`

The Department table after Alteration:



Server: 127.0.0.1 » Database: mydb » Table: department

Showing rows 0 - 1 (2 total, Query took 0.0020 seconds.)

`SELECT * FROM `department``

Options

DEPTNO	DNAME	LOCATION	CONTACT_INFO
10	ACCOUNTING	WANDSWORTH	07999912346
30	SALES	CLAPHAM	07999912345