

Name: Fairooz Nawar

Id: 1912713642

ACTIVITY 1: SELECT e.last_name, e.Department_Id, d.Department_Name

FROM emps e, depts d

WHERE e.Department_Id = d.Department_Id

The screenshot shows the phpMyAdmin interface for a MySQL database named 'lab3'. The left sidebar displays the database schema with tables like 'employee', 'dept_locations', 'depts', 'dependent', 'dept', 'loc', 'emp', 'works_on', and 'project'. The main panel shows the 'employee' table with the following data:

last_name	Department_Id	Department_Name
King	90	Executive
Kochhar	90	Executive
De Haan	90	Executive
Hunold	60	IT
Ernst	60	IT
Lorentz	60	IT
Moungos	50	Shipping
Rajs	50	Shipping
Davies	50	Shipping
Matos	50	Shipping
Vargas	50	Shipping
Zlotkey	80	Sales
Abel	80	Sales
Taylor	80	Sales
Whalem	10	Administration
Hartstein	20	Marketing
Fay	20	Marketing
Higgins	110	Accounting
Gietz	110	Accounting

ACTIVITY 2:

SELECT e.Last_Name, d.Department_name, d.Location_id, l.City

FROM emps e, depts d, locs l

WHERE e.Department_Id = d.Department_id

AND

d.Location_id = l.Location_id

AND e.Commission_pct IS NOT NULL;

The screenshot shows the phpMyAdmin interface for a MySQL database named 'lab3'. The left sidebar lists tables: information_schema, lab3 (with department, dependent, depts, dept_locations, employee, emps, locs, project, works_on), mysql, performance_schema, phpmyadmin, and test. The 'employee' table is selected in the main pane. The query results show three rows of data:

Last_Name	Department_name	Location_id	City
Zlotkey	Sales	2500	Oxford
Abel	Sales	2500	Oxford
Taylor	Sales	2500	Oxford

The SQL query at the top of the results pane is:

```
SELECT e.Last_Name, d.Department_name, d.Location_id, l.City FROM emps e, depts d, locs l WHERE e.Department_Id = d.Department_id AND d.Location_id = l.Location_id AND e.Commission_pct IS NOT NULL
```

Below the results, there are buttons for Print, Copy to clipboard, Export, Display chart, Create view, and a bookmark button.

ACTIVITY 1:

```
SELECT e.Last_Name, e.Job_Id, e.Department_Id,  
d.Department_Name  
FROM emps e JOIN depts d  
ON (e.Department_Id = d.Department_Id)  
JOIN locs l  
ON (d.Location_id = l.Location_id)  
WHERE LOWER(l.City) = 'Toronto';
```

The screenshot shows the phpMyAdmin interface for a MySQL database named 'lab3'. The left sidebar lists databases and tables, including 'employee', 'dept_locations', 'deps', 'dependent', 'dept', 'department', 'emp', 'loc', and 'workson'. The main panel displays the results of the executed SQL query:

```
Showing rows 0 - 1 (total: 2 rows). Query took 0.0428 seconds.  
SELECT e.Last_Name, e.Job_Id, e.Department_Id, d.Department_Name FROM emps e JOIN depts d ON (e.Department_Id = d.Department_Id) JOIN locs l ON (d.Location_id = l.Location_id) WHERE LOWER(l.City) = 'Toronto'  
Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]  
Last_Name Job_Id Department_Id Department_Name  
Hartstein MK_MAN 20 Marketing  
Fay MK_REP 20 Marketing
```

The results show two rows of data from the 'employee' table joined with the 'dept_locations' and 'depts' tables, filtered by city 'Toronto'.

ACTIVITY 2:

```
SELECT Last_Name ,Salary ,Commission_pct
```

```
FROM emps
```

```
ORDER BY Salary, Commission_pct DESC
```

The screenshot shows the phpMyAdmin interface for the 'lab3' database. The 'emps' table is selected. The table structure includes columns for Last_Name, Salary, and Commission_pct. The data is ordered by Salary and Commission_pct in descending order. The commission percentage is listed as 0.15, 0.20, and 0.30.

Last_Name	Salary	Commission_pct
Vargas	2500.00	NULL
Matos	2600.00	NULL
Davies	3100.00	NULL
Rajs	3500.00	NULL
Lorentz	4200.00	NULL
Whalem	4400.00	NULL
Mourgos	5800.00	NULL
Ernst	6000.00	NULL
Fay	6000.00	NULL
Grant	7000.00	0.15
Gietz	8300.00	NULL
Taylor	8600.00	0.20
Hunold	9000.00	NULL
Zlotkey	10500.00	0.20
Abel	11000.00	0.30
Higgins	12000.00	NULL
Hartstein	13000.00	NULL
De Haan	17000.00	NULL
Kochar	17000.00	NULL
Kinn	24000.00	NULL

ACTIVITY 3:

```
SELECT w.Last_Name "Employee", w.Employee_Id "EMP#",  
m.Last_Name "Manager", m.Employee_Id "Mgr#"  
FROM emps w join emps m  
ON (w.Manager_id = m.Employee_Id);
```

The screenshot shows the phpMyAdmin interface with the following details:

- Server:** 127.0.0.1
- Database:** lab3
- Table:** emps
- Query Results:** The results of the provided SQL query are displayed in a grid:

Employee	EMP#	Manager	Mgr#
Kochar	101	King	100
De Haan	102	King	100
Hunold	103	De Haan	102
Ernst	104	Hunold	103
Lorentz	107	Hunold	103
Mougos	124	King	100
Rajs	141	Mougos	124
Davies	142	Mougos	124
Matos	143	Mougos	124
Vargas	144	Mougos	124
Zlotkey	149	King	100
Abel	174	Zlotkey	149
Taylor	176	Zlotkey	149
Grant	178	Zlotkey	149
Whalem	200	Kochar	101
Hartstein	201	King	100
Fay	202	Hartstein	201
Higgins	205	Kochar	101
Gietz	206	Higgins	205

- Toolbar:** Includes options for Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations, Tracking, and Triggers.
- Left Sidebar:** Shows the database schema with tables like information_schema, lab3, department, dependent, depts, dept_locations, employee, emps, locs, project, works_on, mysql, performance_schema, phpmyadmin, and test.
- Bottom Bar:** Includes a search bar, a set of icons for file operations, and system status indicators.

ACTIVITY 1:

```
SELECT ROUND(MAX(Salary),0) 'Maximum',  
ROUND(MIN(Salary),0) 'Minimum',  
ROUND(SUM(Salary),0) 'Sum',  
ROUND(AVG(Salary),0) 'Average'  
FROM emps;
```

The screenshot shows the phpMyAdmin interface on a Windows desktop. The left sidebar lists databases and tables under the 'lab3' database. The main area displays the results of the provided SQL query. The results table has four columns: Maximum, Minimum, Sum, and Average. The data is as follows:

	Maximum	Minimum	Sum	Average
24000	2500	175500	8775	

Below the results, there are options for 'Query results operations' including Print, Copy to clipboard, Export, Display chart, and Create view. A 'Bookmark this SQL query' section is also present.

ACTIVITY 2:

```
SELECT Job_Id,  
       ROUND(MAX(salary),0) 'Maximum',  
       ROUND(MIN(salary),0) 'Minimum',  
       ROUND(SUM(salary),0) 'Sum',  
       ROUND(AVG(salary),0) 'Average'  
FROM emps  
GROUP BY Job_Id  
ORDER BY Job_Id;
```

Job_Id	Maximum	Minimum
AC_ACCOUNT	8300	8300
AC_MGR	12000	12000
ADD_ASST	4400	4400
AD_PRES	24000	24000
AD_VP	17000	17000
IT_PROG	9000	4200
MK_MAN	13000	13000
MK_REP	6000	6000
SA_MAN	10500	7000
SA_REP	11000	11000
ST_CLERK	3500	2500
ST_MAN	5800	5800

ACTIVITY 1:

```
SELECT Job_Id ,COUNT(*)
```

```
FROM emps
```

```
GROUP BY Job_Id;
```

The screenshot shows the phpMyAdmin interface on a Windows desktop. The left sidebar displays the database structure under the 'lab3' database, including tables like 'dept', 'dept_locations', 'dept_manager', 'employees', 'jobs', 'locations', 'departments', and 'works_on'. The main panel shows the results of a query run against the 'emps' table. The query is:

```
SELECT Job_Id ,COUNT(*) FROM emps GROUP BY Job_Id
```

The results are displayed in a table:

Job_Id	COUNT(*)
AC_ACCOUNT	1
AC_MGR	1
AD_ASST	1
AD_PRES	1
AD_VP	2
IT_PROG	3
MK_MAN	1
MK_REP	1
SA_MAN	3
SA REP	1
ST_CLERK	4
ST_MAN	1

ACTIVITY 2:

SELECT Manager_id, MIN(Salary) AS MIN_Salary

FROM emps

WHERE Manager_id IS NOT NULL

GROUP BY Manager_id

HAVING MIN(Salary)>6000

ORDER BY MIN_Salary DESC

The screenshot shows the phpMyAdmin interface for a MySQL database named 'lab3'. The left sidebar lists various tables: New, information_schema, lab3 (with sub-tables New, department, dept, dept_locations, dept_employee, emps, locs, project, works_on), mysql, performance_schema, phpmyadmin, and test. The 'emps' table is selected in the main workspace. A query has been run in the SQL tab:

```
SELECT Manager_id, MIN(Salary) AS MIN_Salary FROM emps WHERE Manager_id IS NOT NULL GROUP BY Manager_id HAVING MIN(Salary)>6000 ORDER BY MIN_Salary DESC
```

The results are displayed in a table:

Manager_id	MIN_Salary
102	9000.00
205	8300.00
149	7000.00

Below the table are buttons for Print, Copy to clipboard, Export, Display chart, and Create view.

ACTIVITY 3:

```
SELECT d.Department_Name "Name", d.Location_id "Location",
COUNT(*) "Number of people",
ROUND (AVG (Salary),2) "Salary"
FROM emps e , depts d
WHERE e.Department_Id = d.Department_Id
GROUP BY d.Department_Name , d.Location_id;
```

The screenshot shows the phpMyAdmin interface for a MySQL database named 'lab3'. The left sidebar lists various tables: department, dependent, dept, dept_locations, employee, emps, locs, project, works_on, mysql, performance_schema, phpmyadmin, and test. The 'dept' table is currently selected. The main panel displays the results of the following SQL query:

```
SELECT d.Department_Name "Name", d.Location_id "Location", COUNT(*) "Number of people", ROUND (AVG (Salary),2) "Salary"
FROM emps e , depts d
WHERE e.Department_Id = d.Department_Id
GROUP BY d.Department_Name , d.Location_id
```

The results are as follows:

Name	Location	Number of people	Salary
Accounting	1700	2	10150.00
Administration	1700	1	4400.00
Executive	1700	3	19333.33
IT	1400	3	6400.00
Marketing	1800	2	9500.00
Sales	2500	3	10033.33
Shipping	1500	5	3500.00