

## Assignment: DML

Download SQLAssignment.sql database from Canvas and import the database to phpMyAdmin as a new database named "SQLAssignment". Write the SQL commands for the following queries and execute those in your machine. Also, show the output tables. **You need to include the screenshots of running SQL commands and output tables in phpMyAdmin.**

1. List the property numbers and city of all properties that have been viewed. You need to eliminate duplicates from the list. Also, arrange the list by ascending order of city (alphabetic order), and within city, in descending order of property number (alphabetic order).

[3 Points]

a. **SQL Command:**

b. **Output Table:**

Show query box

✓ Showing rows 0 - 4 (5 total, Query took 0.0003 seconds.) [city: **ABERDEEN...** - **GLASGOW...**] [propertyNo: **PA14...** - **PG16...**]

```
SELECT DISTINCT propertyNo, city FROM propertyforrent WHERE EXISTS(SELECT propertyNo from viewing WHERE propertyforrent.propertyNo = viewing.propertyNo) ORDER BY city ASC, propertyNo DESC;
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: ↑

Extra options

	propertyNo	city
<input type="checkbox"/> Edit Copy Delete	PA14	Aberdeen
<input type="checkbox"/> Edit Copy Delete	PG4	Glasgow
<input type="checkbox"/> Edit Copy Delete	PG36	Glasgow
<input type="checkbox"/> Edit Copy Delete	PG21	Glasgow
<input type="checkbox"/> Edit Copy Delete	PG16	Glasgow

2. Assume, the salary column in staff table presents the annual salary of a staff. Now, list all staff with monthly salary less than 1000. In your list, show staff number, last name, and monthly salary. [2 Points]

a. **SQL Command:**

b. **Output Table:**

✓ Showing rows 0 - 1 (2 total, Query took 0.0001 seconds.)

```
SELECT staffNo, lName, salary/12 as monthlySalary FROM staff WHERE salary/12 < 1000;
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

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

Extra options

				staffNo	lName	monthlySalary
<input type="checkbox"/>	Edit	Copy	Delete	SA9	Howe	750.0000
<input type="checkbox"/>	Edit	Copy	Delete	SL41	Lee	750.0000

↑ ☐ Check all | With selected: Edit Copy Delete Export

3. Find all clients with the string 'flintyrock' in their email address. In your list, show client number, last name, and email address. [1 Point]

a. **SQL Command:**

b. **Output Table:**

✓ Showing rows 0 - 1 (2 total, Query took 0.0002 seconds.)

```
SELECT clientNo, lName, email FROM client WHERE email LIKE '%flintyrock%';
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

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

Extra options

				clientNo	lName	email
<input type="checkbox"/>	Edit	Copy	Delete	CR56	Flintstone	fred@flintyrock.com
<input type="checkbox"/>	Edit	Copy	Delete	CR62	Flintstone	wilma@flintyrock.com

↑ ☐ Check all | With selected: Edit Copy Delete Export

4. Find the total number of female staff in the Staff table. You need to name the output column as 'NumOfFemaleStaff'. [1 Point]
- SQL Command:**
  - Output Table:**

Your SQL query has been executed successfully.

```
SELECT COUNT(sex) as NumOfFemaleStaff FROM staff WHERE sex = 'F';
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Extra options

NumOfFemaleStaff
4

5. For each branch office with at least two members of staff, find the number of staff working in each branch and the average of their salaries. Your output table should have three columns: BranchNumber, MyCount, MyAverage. [2 Points]
- SQL Command:**
  - Output Table:**

✓ Showing rows 0 - 1 (2 total, Query took 0.0004 seconds.)

```
SELECT branchNo as BranchNumber, COUNT(staffNo) as MyCount, AVG(salary) as MyAverage  
FROM staff GROUP BY branchNo HAVING COUNT(staffNo) >= 2;
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

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

Extra options

BranchNumber	MyCount	MyAverage
B003	3	18000.0000
B005	2	19500.0000

6. Increase the number of rooms by 1 and rent by 10% of property PL94. Show your updated row.

[1 Point]

**a. SQL Command:**

Show query box

✓ 1 row affected. (Query took 0.0007 seconds.)

```
UPDATE propertyforrent SET rooms = rooms + 1, rent = rent*1.1 WHERE propertyNo = 'PL94';
```

[\[ Edit inline \]](#) [\[ Edit \]](#) [\[ Create PHP code \]](#)

**b. Output Table:**

<input type="checkbox"/>	 Edit	 Copy	 Delete	PL94	6 Argyll Street	London	NW2	Flat	6	484	CO87	SL41	B005	images/house3.jpg	images/plan1.jpg
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