

## Database Fundamentals

### Lab Sheet 7 – GROUP BY, HAVING and JOINS

In MySQL Workbench write answers to the following queries based on last week's tables.

1. Save your queries as .sql documents, e.g. lab7<qn>.sql
2. Take **screen prints** of each query and answer in MySQL and save the **queries and answers** to the Word document

Create a zip file and call it **(B000XXXXXStudentNameLab7.zip )**

Copy the .sql files and the word document to the zipped file

Upload the zipped file **(B000XXXXXStudentNameLab7.zip)** to Brightspace on or before the due date

## GROUP BY + HAVING

1. Find all the departments which have more than 4 employees. Use the label "Number of Employees". (hint: first run a query to find the number of employees in each department. Then modify your query).
2. List the lowest salary for employees working for each manager. Exclude any groups where the salary is less than 1000. Sort the output by salary in ascending order. Use the heading "Lowest paid Salary".

## JOINS – Use aliases for tables

```
SELECT    e.empno, d.deptno, d.loc
FROM      emp e INNER JOIN dept d
ON        e.deptno = d.deptno;
```

You are using the following tables in this exercise

- EMP
- DEPT
- SALGRADE

## INNER-JOINS

3. Display each employee's number and name, and department number and name.
4. Display the department number, name and location, and each employee's number and name.
5. Display each department number, and name and employee name. Sort the employees and departments in ascending sequence.
6. Display each department number and name and the total amount paid out in monthly salaries in each department. (SALARY + COMM)
7. Display each department's number and name and the number of employees employed in each department.
8. Display each department's number and name and the number of employees employed in each department. Only display departments with more than 4 employees. (HAVING)