Lab 1. SQL exercise using DreamHome database

This lab uses *DreamHome* database created in the lecture. Populate your tables in DreamHome with sample data in "Instance of the DreamHome rental database.pdf".

It is recommended that you use command line application (i.e. MySQL Command Line Client) for formulating SQL statements.

1. Start MySQL Notifier.

2. In the notification bar on the bottom right corner, find MySQL Notifier, click on the label, then for "MySQL57 - Stopped", click "Start". Now you have your MySQL server running on localhost.
3. Start MySQL Command Line Client.
4. When prompted, enter password – this is the password you set when you install MySQL on your own laptop.
5. Now you can select which database to connect to and formulate SQL statements! (See also "Useful commands in MySQL command Line Client.pdf")

Use SQL statements to find out the results for the following queries:

1. List all staff details
2. List staff whose salary is between 8,000 and 20,000. Show staff name, position and salary.
3. List details of staff in branch B003 and B007.
4. Display all the **distinct** different types of positions of staff.
5. List all branch offices in London, give branch number and address.
6. List the employees whose first names have 'an' in them.
7. List the client numbers and names, order by client number.
8. Find the property number and address of all properties for rent which hasn't been assigned to a staff.
9. How many properties for rent are managed in each branch?
10. List all properties for rent in descending order of their rent.
11. Calculate the annual rent for all properties for rent.
12. Find all the staff who is not manager and with a salary greater than or equal to 12,000.
13. Find out how many managers there are without listing them.
14. Calculate average annual salary for all staff.
15. Calculate average annual salary for staff at each Branch.
16. For each branch with more than 1 member of staff, find number of staff in each branch and their average salaries.
17. Find the highest and lowest paid staff and the difference between them.
18. Count the number of properties for rent with 3 rooms.
19. Find the average salary for assistants and managers.
20. Calculate the weekly rent for all properties for rent, and round the results to the nearest penny. Assuming there are 4 weeks in a month. (Use ROUND(X,D) function, this rounds the argument X to D decimal places.)

Note: In *DreamHome* database, the salary for staff is annual salary and the rent in properties for rent is monthly rent.