Exercise set 3 - SQL basics 2

- Ocelot exercise database presented in SQL basics 1 will be used in this exercise
- Return exercise in .txt format and use formatting presented below (question always followed be the query)

```
-- Select all employees from table
SELECT * FROM EMPS;
```

Aggregate functions

1. Select the average of rate values from departments M-P. Set result set column name to be *Average*. Result set value should be presented with two decimals.
2. Select employee count of employees having rate value between 6-8. Set result set column name to be *EmpRateCount*.
3. Count the sum for rate values of employees working in departments A-G?
4. Select the maximum and minimum value of rate value from employees living in Davis. Set result set column names to be *Greatest* and *Smallest*.
5. Count the amount of employees having rate value over 10 from each department. Department and employee count must be included in the result set. Result set column name should be *Count*. Set result set by *Count* column in descending order.

String patterns

6. Create new usernames for employees using SUBSTRING function. Username should include two letters from firstname, last three letters from surname and first three numbers from phone number. Use column name *Username*.
7. Select different cities and show city names in lowercase letters in the result set. Use column name *Locations*. Order result set by city name in ascending order.
8. Select employee firstname, surname and the length of surname (use column name *surname_length*). Include only employees whose surname length is greater than six characters.

Other functions

9. Categorize department budgets in the following manner: budgets below 100000 dollars will be categorized as *Low* and budgets greater than 100000 as *High*. Include columns *dept*, *duty*, *budget* and a newly created column (use column name *budget_categorization*) in the result set.
10. Count rate value averages for each city (use column name *city_averages*). City and the average of rate values should be included in the result set. Use descending order by rate value for the result set.
11. Analyze what the following SELECT query returns and why (not related to Ocelot training database).

```
SELECT CURRENT_USER,
    CASE
        WHEN CAST(CURRENT_DATE AS CHAR(10)) <= '2011-02-22'
        THEN 'OK'
        ELSE 'Late'
    END as CheckIt
FROM TargetTable
```