# Lab: Data Aggregation

This document defines the **lab** **exercise assignments** for the [MySQL course @ Software University.](https://softuni.bg/opencourses/databases-basics-mysql)

Please submit your solutions (source code) to all the below-described problems in [Judge](https://judge.softuni.org/Contests/744/Data-Aggregation-Lab).

Download and get familiar with the **restaurant** database. You will use it in the assignments bellow.

## Departments Info

Write a query to **count** the number of employees **in each department by** id. Order the information by deparment\_id, then by **Number of employees**. Submit your queries with the **MySQL prepare DB & run queries** strategy.

### Example

|  |  |
| --- | --- |
| **department\_id** | **Number of employees** |
| 1 | 2 |
| 2 | 4 |
| 3 | 3 |

## Average Salary

Write a query to calculate the **average salary** in each department. Order the information by department\_id. **Round** the salary result to **two digits after the decimal point**. Submit your queries with the **MySQL prepare DB & run queries** strategy.

### Example

|  |  |
| --- | --- |
| **department\_id** | **Average Salary** |
| 1 | 2050 |
| 2 | 1090 |
| 3 | 736.67 |

## Min Salary

Write a query to retrieve information about the departments grouped by department\_id with **minimum salary** **higher than 800**. **Round** the salary result to **two digits after the decimal point**. Submit your queries with the **MySQL prepare DB & run queries** strategy.

### Example

|  |  |
| --- | --- |
| **department\_id** | **Min Salary** |
| 1 | 1700 |

## Appetizers Count

Write a query to retrieve the count of all **appetizers** (**category id = 2**) with price **higher than 8**. Submit your queries with the **MySQL prepare DB & run queries** strategy.

## Menu Prices

Write a query to retrieve information about the prices of each category. The output should consist of:

* **Category\_id**
* **Average Price**
* **Cheapest Product**
* **Most Expensive Product**

See the **examples** for more information. **Round** the results to **2 digits after the decimal point**. Submit your queries with the **MySQL prepare DB & run queries** strategy.

### Example

|  |  |  |  |
| --- | --- | --- | --- |
| **category\_id** | **Average Price** | **Cheapest Product** | **Most Expensive Product** |
| 1 | 7.49 | 6.79 | 8.79 |
| 2 | 10.93 | 7.99 | 14.89 |
| 3 | 7.90 | 6.90 | 8.89 |
| 4 | 12.79 | 11.69 | 13.69 |
| 5 | 5.37 | 4.90 | 5.60 |