# Exercises: Built-in Functions (2)

You can check your solutions here: <https://judge.softuni.org/Contests/3135/Built-in-Functions-Part-2>.

# Part I – Queries for Diablo Database

## Games from 2011 and 2012 Year

Find the top 50 games ordered by start date, then by name of the game. Display only games from 2011 and 2012 year. Display start date in the format "**yyyy-MM-dd**".

### Example

|  |  |
| --- | --- |
| **Name** | **Start** |
| Rose Royalty | 2011-01-05 |
| London | 2011-01-13 |
| Broadway | 2011-01-16 |
| … | … |

## User Email Providers

Find all users along with information about their email providers. Display the username and email provider. Sort the results by email provider alphabetically, then by username.

### Example

|  |  |
| --- | --- |
| **Username** | **Email Provider** |
| Pesho | abv.bg |
| monoxidecos | astonrasuna.com |
| bashsassafras | balibless |
| … | … |

## Get Users with IPAdress Like Pattern

Find all users along with their IP addresses sorted by username alphabetically. Display only rows that IP address matches the pattern: "**\*\*\*.1^.^.\*\*\***".

Legend: **\*** - one symbol, **^** - one or more symbols  
Example

|  |  |
| --- | --- |
| **Username** | **IP Address** |
| bindbawdy | 192.157.20.222 |
| evolvingimportant | 223.175.227.173 |
| inguinalself | 255.111.250.207 |
| … | … |

## Show All Games with Duration and Part of the Day

Find all games with part of the day and duration sorted by game name alphabetically then by duration (alphabetically, not by the timespan) and part of the day (all ascending). **Parts of the day** should be **Morning** (time is >= 0 and < 12), **Afternoon** (time is >= 12 and < 18), **Evening** (time is >= 18 and < 24). **Duration** should be **Extra** **Short** (smaller or equal to 3), **Short** (between 4 and 6 including), **Long** (greater than 6) and **Extra Long** (without duration).

### Example

|  |  |  |
| --- | --- | --- |
| **Game** | **Part of the Day** | **Duration** |
| Ablajeck | Morning | Long |
| Ablajeck | Afternoon | Short |
| Abregado Rae | Afternoon | Long |
| Abrion | Morning | Extra Short |
| Acaeria | Evening | Long |
| … | … | … |

# Part II – Date Functions Queries

## Orders Table

You are given a table **Orders(Id, ProductName, OrderDate)** filled with data. Consider that the **payment** for that order must be accomplished **within 3 days after the order date**. Also the **delivery date is up to 1 month**. Write a query to show each product’s **name**, **order date**, **pay and deliver due dates**.

### Original Table

|  |  |  |
| --- | --- | --- |
| **Id** | **ProductName** | **OrderDate** |
| 1 | Butter | 2016-09-19 00:00:00.000 |
| 2 | Milk | 2016-09-30 00:00:00.000 |
| 3 | Cheese | 2016-09-04 00:00:00.000 |
| 4 | Bread | 2015-12-20 00:00:00.000 |
| 5 | Tomatoes | 2015-12-30 00:00:00.000 |
| … | … | … |

### Output

|  |  |  |  |
| --- | --- | --- | --- |
| **ProductName** | **OrderDate** | **Pay Due** | **Deliver Due** |
| Butter | 2016-09-19 00:00:00.000 | 2016-09-22 00:00:00.000 | 2016-10-19 00:00:00.000 |
| Milk | 2016-09-30 00:00:00.000 | 2016-10-03 00:00:00.000 | 2016-10-30 00:00:00.000 |
| Cheese | 2016-09-04 00:00:00.000 | 2016-09-07 00:00:00.000 | 2016-10-04 00:00:00.000 |
| Bread | 2015-12-20 00:00:00.000 | 2015-12-23 00:00:00.000 | 2016-01-20 00:00:00.000 |
| Tomatoes | 2015-12-30 00:00:00.000 | 2016-01-02 00:00:00.000 | 2016-01-30 00:00:00.000 |
| … | … | … | … |

## People Table

Create a table **People(Id, Name, Birthdate).** Write a query to **find** **age in years**, **months**, **days** and **minutes** for each person for the **current time** of executing the query.

### Original Table

|  |  |  |
| --- | --- | --- |
| **Id** | **Name** | **Birthdate** |
| 1 | Victor | 2000-12-07 00:00:00.000 |
| 2 | Steven | 1992-09-10 00:00:00.000 |
| 3 | Stephen | 1910-09-19 00:00:00.000 |
| 4 | John | 2010-01-06 00:00:00.000 |
| … | … | … |

### Example Output

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Age in Years** | **Age in Months** | **Age in Days** | **Age in Minutes** |
| Victor | 16 | 189 | 5754 | 8286787 |
| Steven | 24 | 288 | 8764 | 12621187 |
| Stephen | 106 | 1272 | 38706 | 55737667 |
| John | 6 | 80 | 2437 | 3510307 |
| … | … | … | … | … |