**1)[https://www.w3schools.com/sql/trysql.asp?filename=trysql\_op\_in](https://www.w3schools.com/sql/trysql.asp?filename=trysql_op_in" \t "_blank)**

**Table names: customers, orders, products**

**1) What is the most expensive product?**

**SELECT MAX(Price) AS HighestPrice, ProductID, ProductName**

**FROM Products;**

|  |  |  |
| --- | --- | --- |
| **HighestPrice** | **ProductID** | **ProductName** |
| 263.5 | 38 | Côte de Blaye |

**2) What is the average product price?**

**SELECT AVG(Price)**

**FROM Products;**

|  |
| --- |
| **AVG(Price)** |
| 28.866363636363637 |

**3) List customers whose name start on B.**

**SELECT CustomerName**

**FROM Customers**

**WHERE CustomerName LIKE 'b%';**

|  |
| --- |
| **CustomerName** |
| Berglunds snabbköp |
| Blauer See Delikatessen |
| Blondel père et fils |
| Bólido Comidas preparadas |
| Bon app' |
| Bottom-Dollar Marketse |
| B's Beverages |

**4) Number of products by category and supplier, sorted by the number of products**

**SELECT COUNT (\*) AS NumberOfProducts, ProductName, SupplierID, CategoryID**

**FROM Products**

**GROUP BY CategoryID, SupplierID**

**ORDER BY NumberOfProducts DESC;**

|  |  |  |  |
| --- | --- | --- | --- |
| **NumberOfProducts** | **ProductName** | **CategoryID** | **SupplierID** |
| 4 | Chef Anton's Cajun Seasoning | 2 | 2 |
| 4 | Teatime Chocolate Biscuits | 3 | 8 |
| 3 | Sasquatch Ale | 1 | 16 |
| 3 | NuNuCa Nuß-Nougat-Creme | 3 | 11 |
| 3 | Gorgonzola Telino | 4 | 14 |
| 3 | Geitost | 4 | 15 |
| 3 | Inlagd Sill | 8 | 17 |
| 2 | Chais | 1 | 1 |
| 2 | Côte de Blaye | 1 | 18 |
| 2 | Grandma's Boysenberry Spread | 2 | 3 |
| 2 | Zaanse koeken | 3 | 22 |
| 2 | Maxilaku | 3 | 23 |
| 2 | Queso Cabrales | 4 | 5 |
| 2 | Raclette Courdavault | 4 | 28 |
| 2 | Gustaf's Knäckebröd | 5 | 9 |
| 2 | Gnocchi di nonna Alice | 5 | 26 |
| 2 | Tourtière | 6 | 25 |
| 2 | Boston Crab Meat | 8 | 19 |
| 2 | Røgede sild | 8 | 21 |
| 1 | Outback Lager | 1 | 7 |
| 1 | Guaraná Fantástica | 1 | 10 |
| 1 | Rhönbräu Klosterbier | 1 | 12 |
| 1 | Ipoh Coffee | 1 | 20 |
| 1 | Lakkalikööri | 1 | 23 |
| 1 | Aniseed Syrup | 2 | 1 |
| 1 | Genen Shouyu | 2 | 6 |
| 1 | Vegie-spread | 2 | 7 |
| 1 | Original Frankfurter grüne Soße | 2 | 12 |
| 1 | Gula Malacca | 2 | 20 |
| 1 | Sirop d'érable | 2 | 29 |
| 1 | Pavlova | 3 | 7 |
| 1 | Tarte au sucre | 3 | 29 |
| 1 | Wimmers gute Semmelknödel | 5 | 12 |
| 1 | Singaporean Hokkien Fried Mee | 5 | 20 |
| 1 | Filo Mix | 5 | 24 |
| 1 | Mishi Kobe Niku | 6 | 4 |
| 1 | Alice Mutton | 6 | 7 |
| 1 | Thüringer Rostbratwurst | 6 | 12 |
| 1 | Perth Pasties | 6 | 24 |
| 1 | Uncle Bob's Organic Dried Pears | 7 | 3 |
| 1 | Longlife Tofu | 7 | 4 |
| 1 | Tofu | 7 | 6 |
| 1 | Rössle Sauerkraut | 7 | 12 |
| 1 | Manjimup Dried Apples | 7 | 24 |
| 1 | Ikura | 8 | 4 |
| 1 | Konbu | 8 | 6 |
| 1 | Carnarvon Tigers | 8 | 7 |
| 1 | Nord-Ost Matjeshering | 8 | 13 |
| 1 | Escargots de Bourgogne | 8 | 27 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ProductID** | **ProductName** | **SupplierID** | **CategoryID** | **Unit** | **Price** |
| 1 | Chais | 1 | 1 | 10 boxes x 20 bags | 18 |

**5) List all customers who made more than one order.**

**SELECT CustomerID, CustomerName**

**FROM Customers**

**WHERE CustomerID IN**

**(SELECT CustomerID, COUNT()**

**FROM Orders**

**GROUP BY CustomerID**

**HAVING COUNT (OrderID) > 1);**

|  |  |
| --- | --- |
| **CustomerID** | **NumberOfOders** |
| 4 | 2 |
| 5 | 3 |
| 7 | 4 |
| 9 | 3 |
| 10 | 4 |
| 14 | 2 |
| 17 | 2 |
| 19 | 2 |
| 20 | 10 |
| 21 | 3 |
| 24 | 4 |
| 25 | 4 |
| 28 | 2 |
| 29 | 2 |
| 34 | 2 |
| 35 | 2 |
| 36 | 3 |
| 37 | 6 |
| 38 | 3 |
| 39 | 2 |
| 41 | 5 |
| 44 | 3 |
| 46 | 5 |
| 48 | 2 |
| 49 | 3 |
| 51 | 5 |
| 55 | 4 |
| 58 | 2 |
| 59 | 3 |
| 60 | 3 |
| 61 | 4 |
| 62 | 2 |
| 63 | 7 |
| 65 | 7 |
| 66 | 3 |
| 67 | 2 |
| 68 | 2 |
| 69 | 3 |
| 71 | 4 |
| 72 | 3 |
| 73 | 2 |
| 75 | 6 |
| 76 | 2 |
| 80 | 4 |
| 81 | 2 |
| 83 | 2 |
| 84 | 2 |
| 85 | 2 |
| 86 | 4 |
| 87 | 7 |
| 88 | 2 |
| 89 | 2 |

**6) List customers who did not order anything.**

**SELECT CustomerID, CustomerName**

**FROM Customers**

**WHERE CustomerID NOT IN**

**(SELECT CustomerID FROM Orders);**

|  |  |
| --- | --- |
| **CustomerID** | **CustomerName** |
| 1 | Alfreds Futterkiste |
| 6 | Blauer See Delikatessen |
| 12 | Cactus Comidas para llevar |
| 22 | FISSA Fabrica Inter. Salchichas S.A. |
| 26 | France restauration |
| 32 | Great Lakes Food Market |
| 40 | La corne d'abondance |
| 42 | Laughing Bacchus Wine Cellars |
| 43 | Lazy K Kountry Store |
| 45 | Let's Stop N Shop |
| 50 | Maison Dewey |
| 53 | North/South |
| 57 | Paris spécialités |
| 64 | Rancho grande |
| 74 | Spécialités du monde |
| 78 | The Cracker Box |
| 82 | Trail's Head Gourmet Provisioners |

**2)** **Write a program which would go through a sequence of digits and add up those digits that match the next digit in the sequence. The sequence is circular - the last digit and the fist digit are next to each other.**

**For example:**

**1133 equals 4: the first 1 is followed by another 1 (sum = 1 ), the second one is not followed by another 1 (sum is still 1), 3 is followed by 3 (sum= 1+ 3), the last 3 is followed by 1 (still sum = 4)**

**1111 equals 4 because all the 1s are followed by the same digit  
4567 equals 0 because no digit matches the next  
96767679 equals 9 because the only digit that is followed by the same digit is 9.**

**What is the solution of the sequence in the attachment?**

**Answer for the specific sequence: 1128**

**SOLUTION: ROIVenue\_Tasks - Arpad Kajari\SequenceSumGame\sequence-sum.html.**

**NOTE: It is a console app in JS. Upon load web browser will prompt you to add any number. Validation implemented, so ONLY digits can be added. Also, console will log the changes in the SUM, while running through the sequence.**

**3)** **Implement a simple web application in Javascript or Typescript that display a form to a user. User should fill in his name, email and his date of birth. There should be a submit button that save the data as JSON into browser’s local storage and a page saying “Thank you for your time” should be displayed. If the data are not valid, it should display appropriate validation message and let the user to fix the input. Don’t spend much time on it. You can use any framework or library you want (like jQuery or Angular).**

**SOLUTION: ROIVenue\_Tasks - Arpad Kajari\LocalStorageFrom\index.html.**