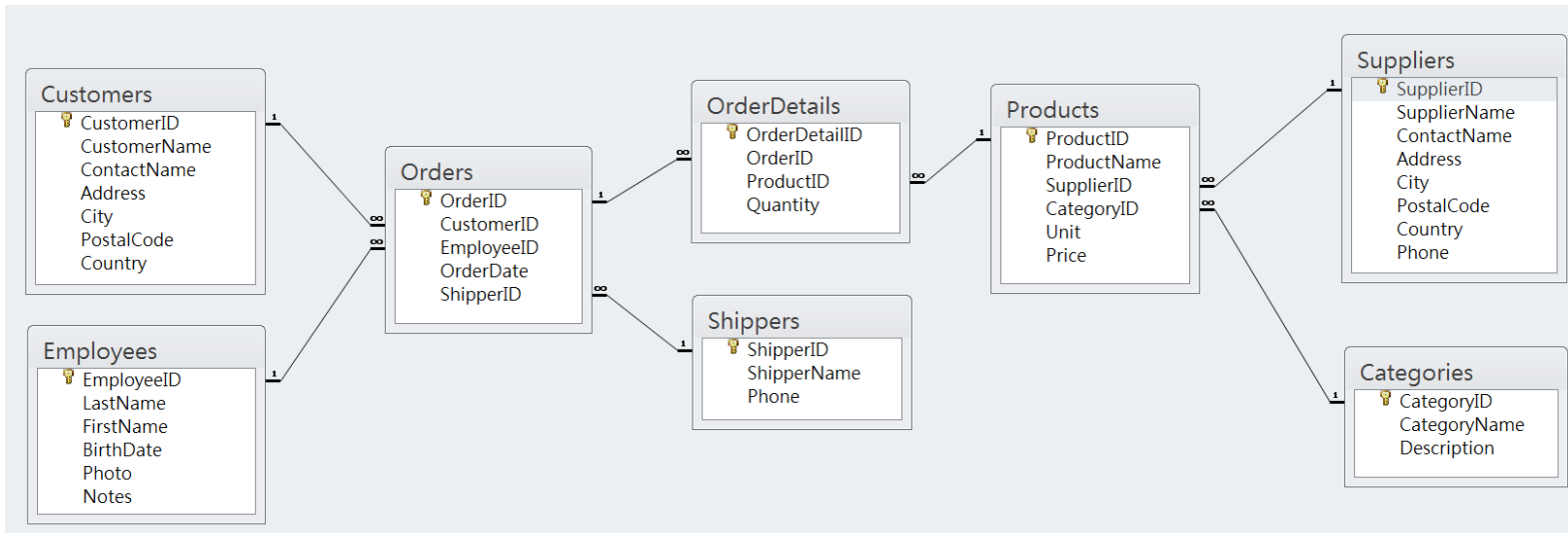


Схема базы данных, с которой мы будем работать (та БД, которая у вас получилась в результате выполнения скрипта):



Вам необходимо написать SQL запросы, перечисленные ниже.

Результатом вашей домашней работы для каждого пункта должны быть **SQL запрос + скриншот результата выполнения вашего запроса** (SQL запросы и скриншоты добавляем прямо в файл с заданием).

1. (ПРИМЕР) Выбрать все строки из таблицы [Suppliers].

SELECT *

FROM Suppliers;

SupplierID	SupplierName	ContactName	Address	City	PostalCode	Country	Phone
1	Exotic Liquid	Charlotte Cooper	49 Gilbert St.	Londona	EC1 4SD	UK	(171) 555-2222
2	New Orleans Cajun Delights	Shelley Burke	P.O. Box 78934	New Orleans	70117	USA	(100) 555-4822
3	Grandma Kelly's Homestead	Regina Murphy	707 Oxford Rd.	Ann Arbor	48104	USA	(313) 555-5735
4	Tokyo Traders	Yoshi Nagase	9-8 Sekimai Musashino-shi	Tokyo	100	Japan	(03) 3555-5011
5	Cooperativa de Quesos 'Las Cabras'	Antonio del Valle Saavedra	Calle del Rosal 4	Oviedo	33007	Spain	(98) 598 76 54
6	Mayumi's	Mayumi Ohno	92 Setsuko Chuo-ku	Osaka	545	Japan	(06) 431-7877
7	Pavlova, Ltd.	Ian Devling	74 Rose St. Moonie Ponds	Melbourne	3058	Australia	(03) 444-2343
8	Specialty Biscuits, Ltd.	Peter Wilson	29 King's Way	Manchester	M14 4SD	UK	(161) 555-4448
9	PB Knäckebröd AB	Lars Peterson	Kaloadagatan 13	Göteborg	S-345 67	Sweden	031-987 65 43
10	Refrescos Americanas LTDA	Carlos Diaz	Av. das Americanas 12.890	São Paulo	5442	Brazil	(11) 555 4640
11	Hell Süßwaren GmbH & Co. KG	Petra Winkler	Tiergartenstraße 5	Berlin	10785	Germany	(010) 9984510
12	Plutzer Lebensmittelgroßmärkte AG	Martin Bein	Bogenallee 51	Frankfurt	60439	Germany	(069) 992755
13	Nord-Ost-Fisch Handelsgesellschaft...	Sven Petersen	Frahmredder 112a	Cuxhaven	27478	Germany	(04721) 8713
14	Formaggi Fortini s.r.l.	Elio Rossi	Viale Dante, 75	Ravenna	48100	Italy	(0544) 60323
15	Norske Meierier	Beate Vileid	Hatlevegen 5	Sandvika	1320	Norway	(0)2-953010
16	Bigfoot Breweries	Cheryl Saylor	3400 - 8th Avenue Suite 210	Bend	97101	USA	(503) 555-9931
17	Svensk Sjöföda AB	Michael Björn	Brovallavägen 231	Stockholm	S-123 45	Sweden	08-123 45 67
18	Aux denrées alimentaires	Guyène Nodier	203, Rue des Francs-Bour...	Paris	75004	France	(1) 03.83.00.68

2. Из таблицы [Employees] выбрать все имена, фамилии, дни рождения в следующем порядке: BirthDate, FirstName, LastName.

SELECT BirthDate, FirstName, LastName FROM deliveries.employees
group by BirthDate, FirstName, LastName

The screenshot shows the MySQL Workbench interface. The 'Query Editor' contains the following SQL query:

```
SELECT BirthDate, FirstName, LastName FROM deliveries.employees  
group by BirthDate, FirstName, LastName
```

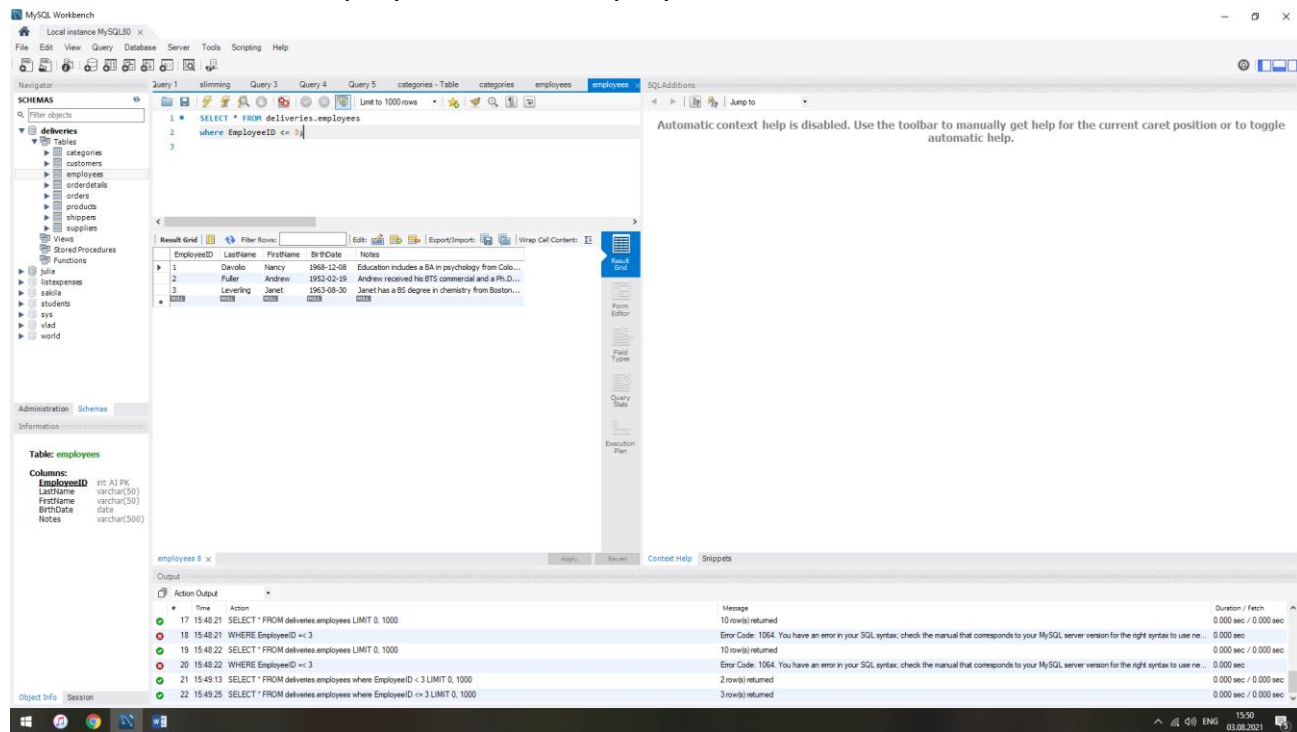
The 'Result Grid' displays the following data:

BirthDate	FirstName	LastName
1960-12-08	Nancy	Davolio
1952-02-19	Andrew	Fuller
1963-09-30	Janet	Levelling
1958-09-19	Margaret	Peacock
1955-03-04	Steven	Buchanan
1963-07-02	Michael	Suzanna
1960-05-29	Robert	King
1958-01-09	Laura	Callehan
1969-07-02	Anne	Dodsworth
1928-09-19	Adam	Viest

The 'Output' pane at the bottom shows the execution log with the following messages:

```
4 15:26:50 SELECT CategoryName FROM 'deliveries'. 'categories' LIMIT 0, 1000 8 row(s) returned 0.000 sec / 0.000 sec  
5 15:26:52 SELECT Description FROM 'deliveries'. 'categories' LIMIT 0, 1000 8 row(s) returned 0.000 sec / 0.000 sec  
6 15:27:33 SELECT * FROM deliveries.categories LIMIT 0, 1000 8 row(s) returned 0.000 sec / 0.000 sec  
7 15:31:19 SELECT * FROM deliveries.employees LIMIT 0, 1000 10 row(s) returned 0.000 sec / 0.000 sec  
8 15:33:50 SELECT * FROM deliveries.employees LIMIT 0, 1000 10 row(s) returned 0.000 sec / 0.000 sec  
9 15:39:34 SELECT BirthDate, FirstName, LastName FROM deliveries.employees group by BirthDate, FirstName, LastName LIMIT 0, 1000 10 row(s) returned 0.000 sec / 0.000 sec
```

3. Выбрать первые 3 строки из таблицы с сотрудниками (Employees).SELECT * FROM deliveries.employeeswhere EmployeeID <= 3;



4. Выбрать имена и фамилии сотрудников (Employees), родившихся в 1958 году.

SELECT LastName,FirstName FROM deliveries.employees

WHERE BirthDate LIKE '%1958%';

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
SELECT LastName, FirstName FROM deliveries.employees
WHERE BirthDate LIKE '%1958%';
```

The query is executed, and the results are displayed in the 'Result Grid' tab. The results show two rows:

LastName	FirstName
Peacock	Margaret
Calahan	Laura

The 'Output' tab shows the execution details:

Action	Message	Duration / Feat.
25 15:56:54 SELECT LastName, FirstName FROM deliveries.employees WHERE BirthDate LIKE '%1958%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
26 15:57:42 SELECT LastName, FirstName FROM deliveries.employees WHERE BirthDate LIKE '%1958%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
27 15:57:51 SELECT * FROM deliveries.employees LIMIT 0, 1000	10 row(s) returned	0.000 sec / 0.000 sec
28 15:58:22 SELECT LastName, FirstName FROM deliveries.employees WHERE BirthDate LIKE '%1958%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
29 15:58:28 SELECT * FROM deliveries.employees LIMIT 0, 1000	10 row(s) returned	0.000 sec / 0.000 sec
30 15:59:10 SELECT LastName, FirstName FROM deliveries.employees WHERE BirthDate LIKE '%1958%' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

5. Выбрать все товары (Products) с ценой от 15 до 40.

SELECT * FROM deliveries.products

WHERE Price BETWEEN 15 AND 45

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
SELECT * FROM deliveries.products
WHERE Price BETWEEN 15 AND 45;
```

The query is executed, and the results are displayed in the 'Result Grid' tab. The results show a list of products with their details:

ProductID	ProductName	SupplierID	CategoryID	Unit	Price
1	Chai	1	1	10 boxes x 20 bags	18
2	Chang	1	1	24 - 12 oz bottles	19
4	Chief Antan's Cajun Seasoning	2	2	48 - 6 oz jars	22
5	Chief Antan's Gumbo Mix	2	2	26 boxes	21
6	Grandin's Boysenberry Spread	3	2	12 - 8 oz jars	25
7	Uncle Bob's Organic Dried Pears	3	7	12 - 1 lb pkgs.	30
8	Northwoods Cranberry Sauce	3	2	12 - 12 oz jars	40
10	Steele's	4	8	12 - 200 ml jars	31
11	Queso Cabrales	5	4	1 kg pkg.	21
12	Queso Manchego La Pastora	5	4	10 - 500 g pkgs.	38
14	Tofu	6	7	40 - 200 g pkgs.	23
15	Genen Shoyu	6	2	24 - 250 ml bottles	16
16	Pavlova	7	3	32 - 500 g boxes	17
17	Alice Mutton	7	6	20 - 1 kg tins	39
18	Gustaf's Knickknack	9	5	24 - 800 g pkgs.	21
26	Gumbir Gummibärchen	11	3	100 - 250 g bags	31
27	Schoggi Schokolade	11	3	100 - 100 g pieces	44
30	Nord-Ost Maple Syrup	13	8	10 - 200 g glasses	26
32	Mascarpone Fabbri	14	4	24 - 200 g pkgs.	32
35	Steeleye Stout	16	1	24 - 12 oz bottles	18
36	Teagard Sil	17	8	24 - 250 g jars	19
37	Gourmet Ice	17	8	12 - 500 g pkgs.	26
39	Chartruese Verte	18	1	750 cc per bottle	18
40	Boston Crab Meat	19	8	24 - 4 oz tins	18
44	Gula Melacca	20	2	20 - 2 kg bags	19

The 'Output' tab shows the execution details:

Action	Message	Duration / Feat.
28 15:58:22 SELECT LastName, FirstName FROM deliveries.employees WHERE BirthDate LIKE '%1958%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
29 15:58:28 SELECT * FROM deliveries.employees LIMIT 0, 1000	10 row(s) returned	0.000 sec / 0.000 sec
30 15:59:10 SELECT LastName, FirstName FROM deliveries.employees WHERE BirthDate LIKE '%1958%' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
31 16:07:19 SELECT * FROM deliveries.products LIMIT 0, 1000	77 row(s) returned	0.000 sec / 0.000 sec
32 16:09:08 SELECT * FROM deliveries.products WHERE Price >= 15 LIMIT 0, 1000	53 row(s) returned	0.000 sec / 0.000 sec
33 16:10:31 SELECT * FROM deliveries.products WHERE Price BETWEEN 15 AND 45 LIMIT 0, 1000	43 row(s) returned	0.000 sec / 0.000 sec

6. Найти товары (Products) с минимальной ценой.

SELECT min(Price) FROM deliveries.products;

The screenshot shows the MySQL Workbench interface. The query editor contains the SQL statement: `SELECT min(Price) FROM deliveries.products;`. The left sidebar shows the database schema with the 'deliveries' database selected. The bottom panel shows the 'Output' tab with the following results:

Time	Action	Message	Duration / Feat
33 16:10:31	SELECT * FROM deliveries.products WHERE Price BETWEEN 15 AND 45 LIMIT 0, 1000	43 row(s) returned	0.000 sec / 0.000 sec
34 16:14:31	SELECT * FROM deliveries.products LIMIT 0, 1000	77 row(s) returned	0.000 sec / 0.000 sec
35 16:15:03	SELECT PriceMin FROM deliveries.products LIMIT 0, 1000	Error Code: 1305. FUNCTION deliveries.Price does not exist	0.000 sec
36 16:15:06	SELECT PriceMin FROM deliveries.products LIMIT 0, 1000	Error Code: 1305. FUNCTION deliveries.Price does not exist	0.000 sec
37 16:15:10	SELECT PriceMin FROM deliveries.products LIMIT 0, 1000	Error Code: 1054. Unknown column 'PriceMin' in field list	0.000 sec
38 16:16:41	SELECT min(Price) FROM deliveries.products LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

7. Найти товары (Products) с максимальной ценой.

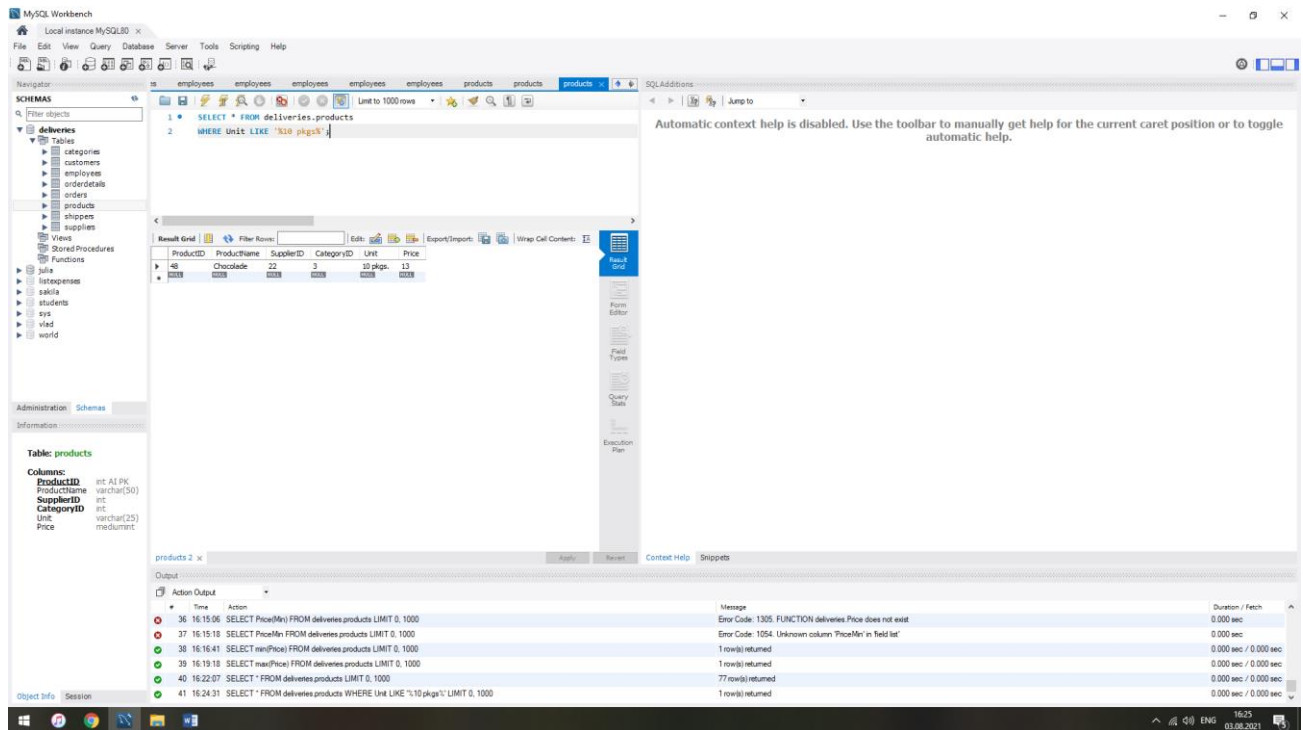
SELECT max(Price) FROM deliveries.products;

The screenshot shows the MySQL Workbench interface. The query editor contains the SQL statement: `SELECT max(Price) FROM deliveries.products;`. The left sidebar shows the database schema with the 'deliveries' database selected. The bottom panel shows the 'Output' tab with the following results:

Time	Action	Message	Duration / Feat
34 16:14:31	SELECT * FROM deliveries.products LIMIT 0, 1000	77 row(s) returned	0.000 sec / 0.000 sec
35 16:15:03	SELECT PriceMin FROM deliveries.products LIMIT 0, 1000	Error Code: 1305. FUNCTION deliveries.Price does not exist	0.000 sec
36 16:15:06	SELECT PriceMin FROM deliveries.products LIMIT 0, 1000	Error Code: 1305. FUNCTION deliveries.Price does not exist	0.000 sec
37 16:15:10	SELECT PriceMin FROM deliveries.products LIMIT 0, 1000	Error Code: 1054. Unknown column 'PriceMin' in field list	0.000 sec
38 16:16:41	SELECT min(Price) FROM deliveries.products LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
39 16:19:10	SELECT max(Price) FROM deliveries.products LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

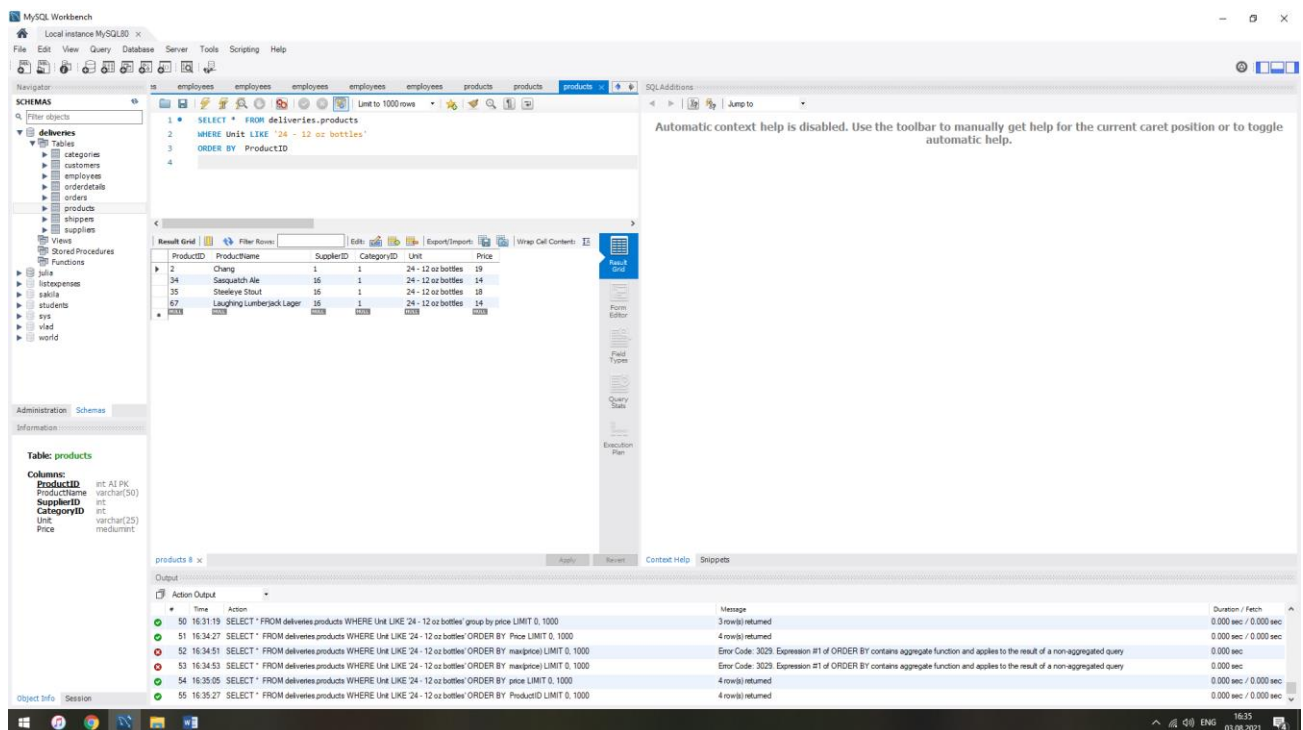
8. Выбрать все товары (Products), у которых Unit - '10 pkgs.'.

```
SELECT * FROM deliveries.products  
WHERE Unit LIKE '%10 pkgs%';
```



9. Выбрать все товары (Products), у которых Unit – “24 - 12 oz bottles” и отсортировать эти продукты в порядке убывания.

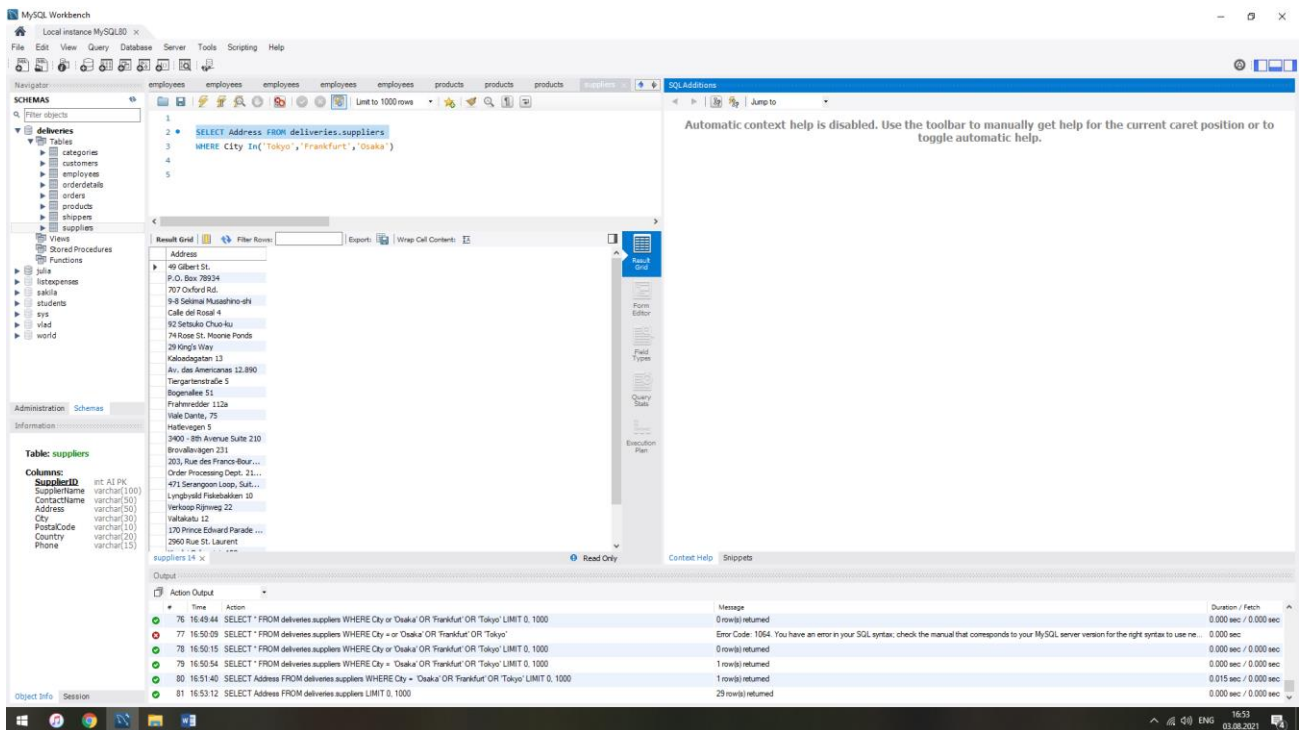
```
SELECT * FROM deliveries.products  
WHERE Unit LIKE '24 - 12 oz bottles'  
ORDER BY ProductID
```



10. Выбрать адреса всех поставщиков (Suppliers), которые проживают в одном из городов: Tokyo, Frankfurt, Osaka. Реализовать двумя способами – в одном случае через OR, в другом – через IN.

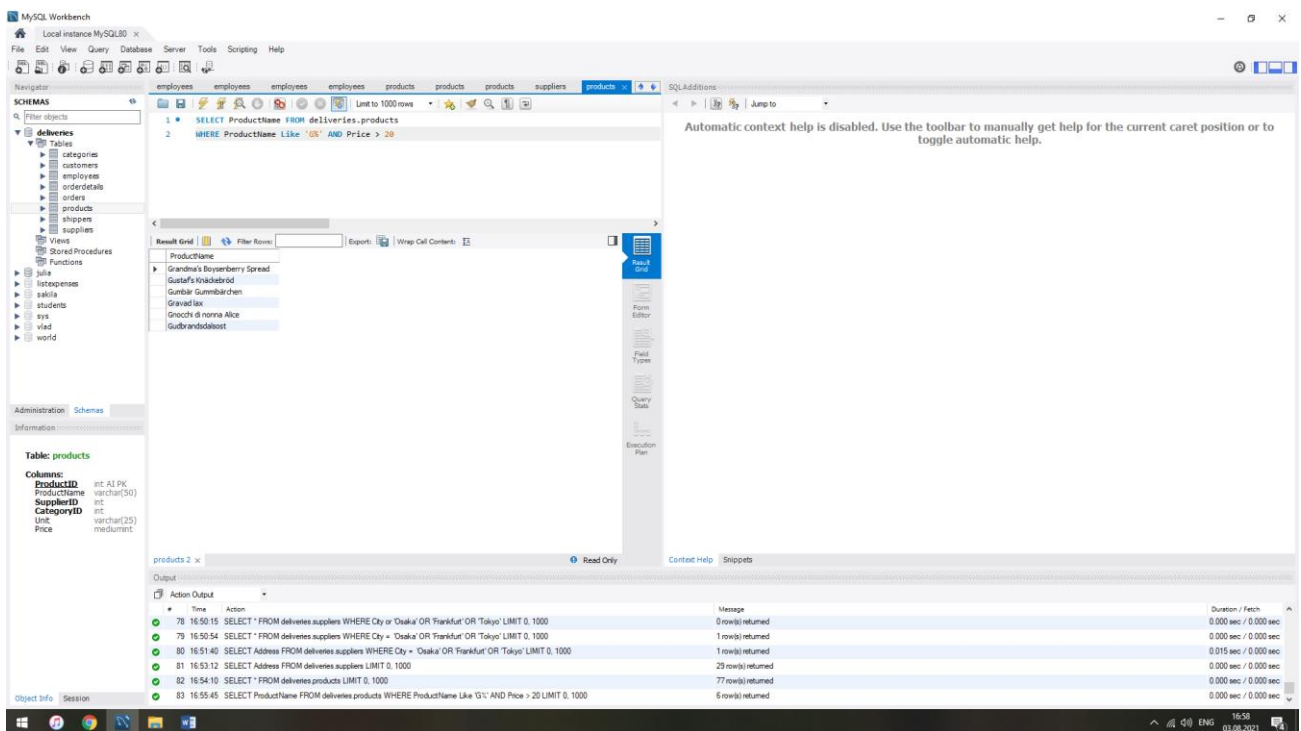
SELECT Address FROM deliveries.suppliers
WHERE City LIKE 'Tokyo' OR 'Frankfurt' OR 'Osaka'

SELECT Address FROM deliveries.suppliers
WHERE City In('Tokyo','Frankfurt','Osaka')



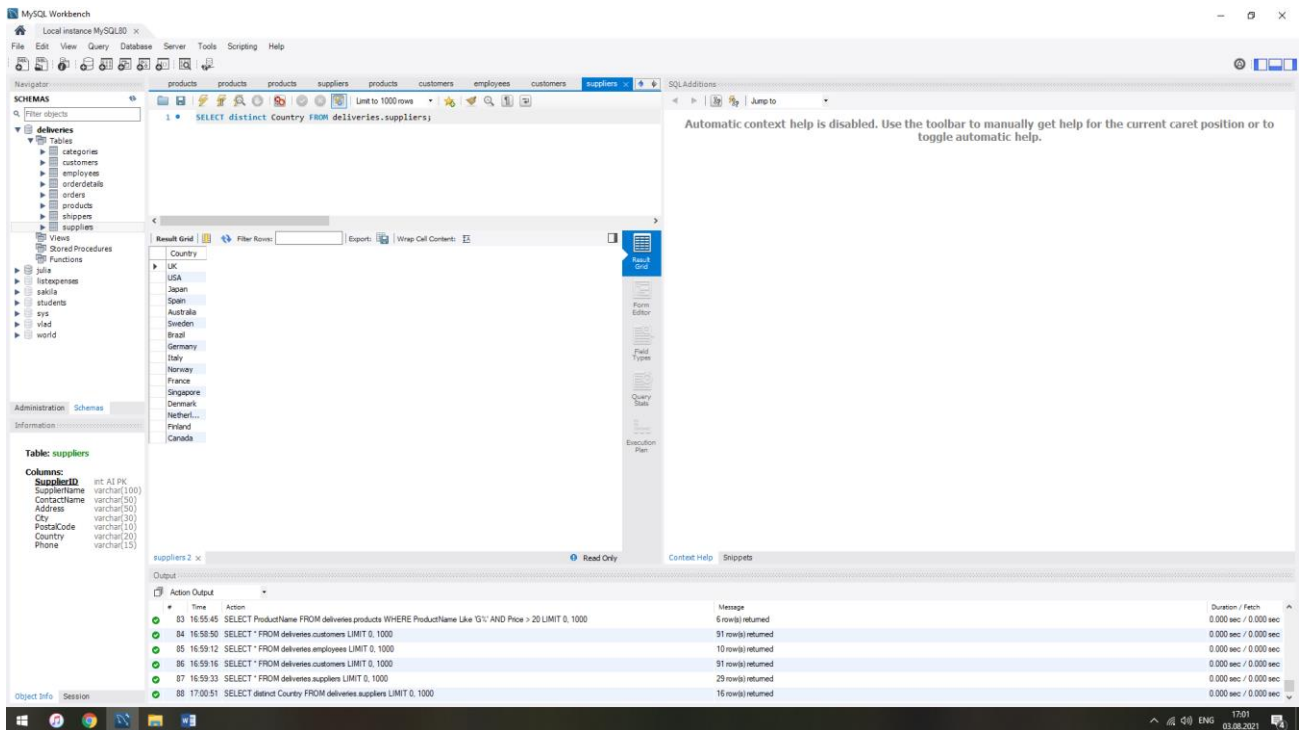
11. Выбрать названия товаров (Products), начинающихся с буквы "G", у которых цена (Price) больше 20.

SELECT ProductName FROM deliveries.products
WHERE ProductName Like 'G%' AND Price > 20



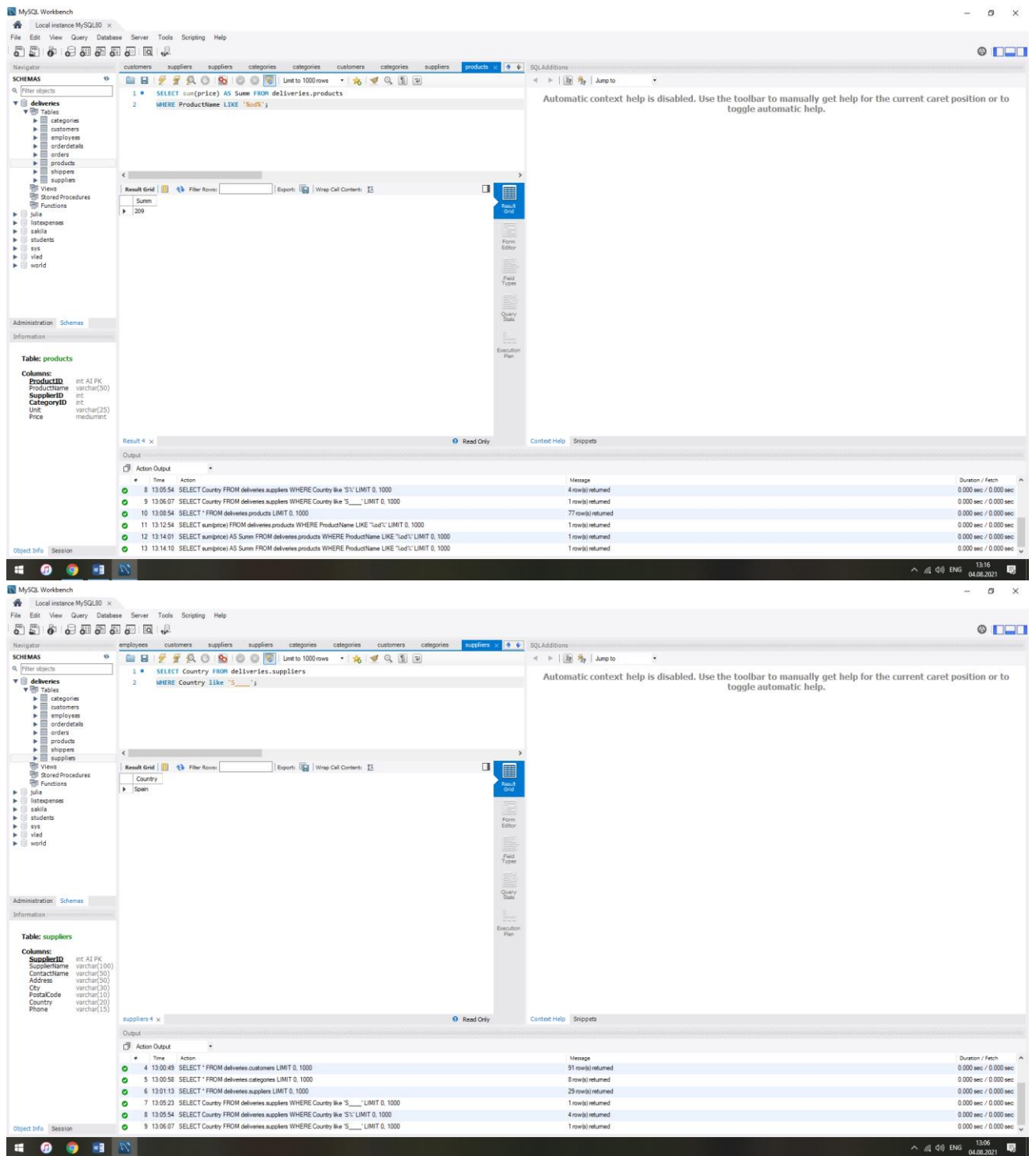
12. Вывести список стран, из которых есть поставщики (Suppliers), страны не должны повторяться.

SELECT distinct Country FROM deliveries.suppliers;



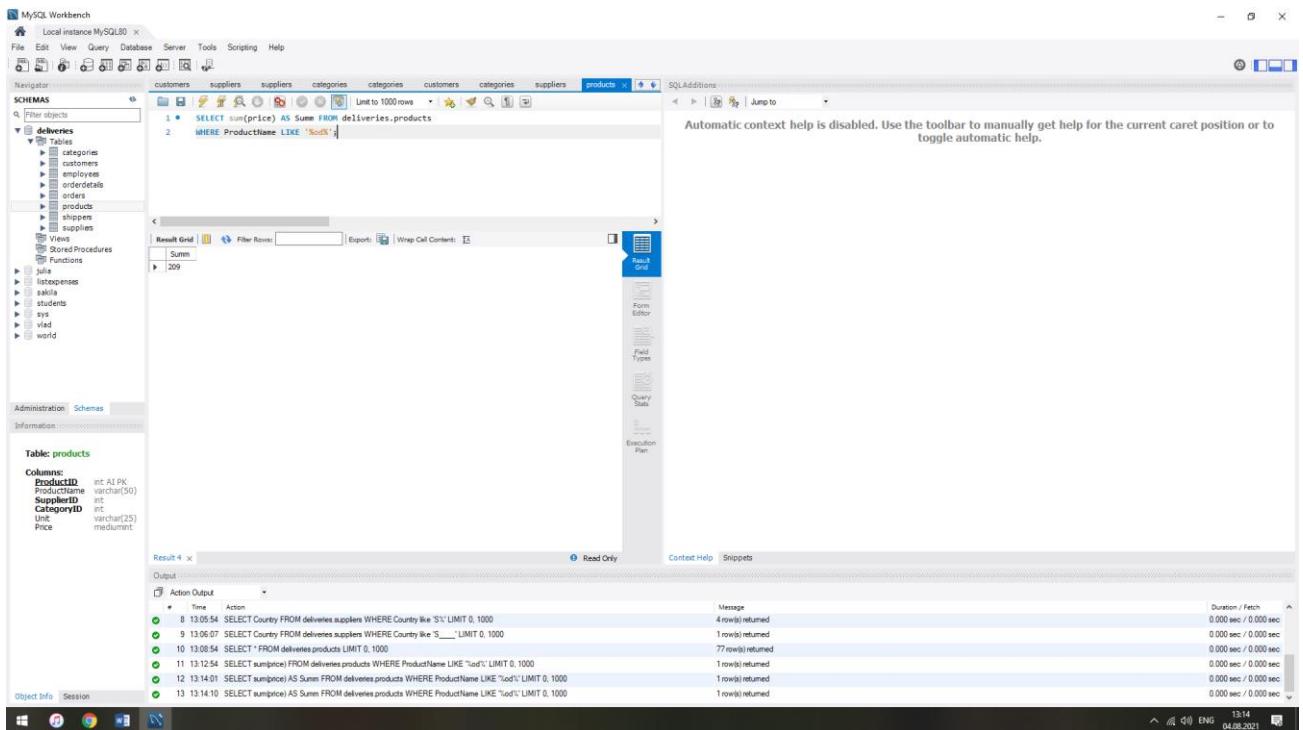
13. Вывести список стран начинающихся на S и состоящих из 5 букв, из которых есть поставщики.

SELECT Country FROM deliveries.suppliers
WHERE Country like 'S_____';



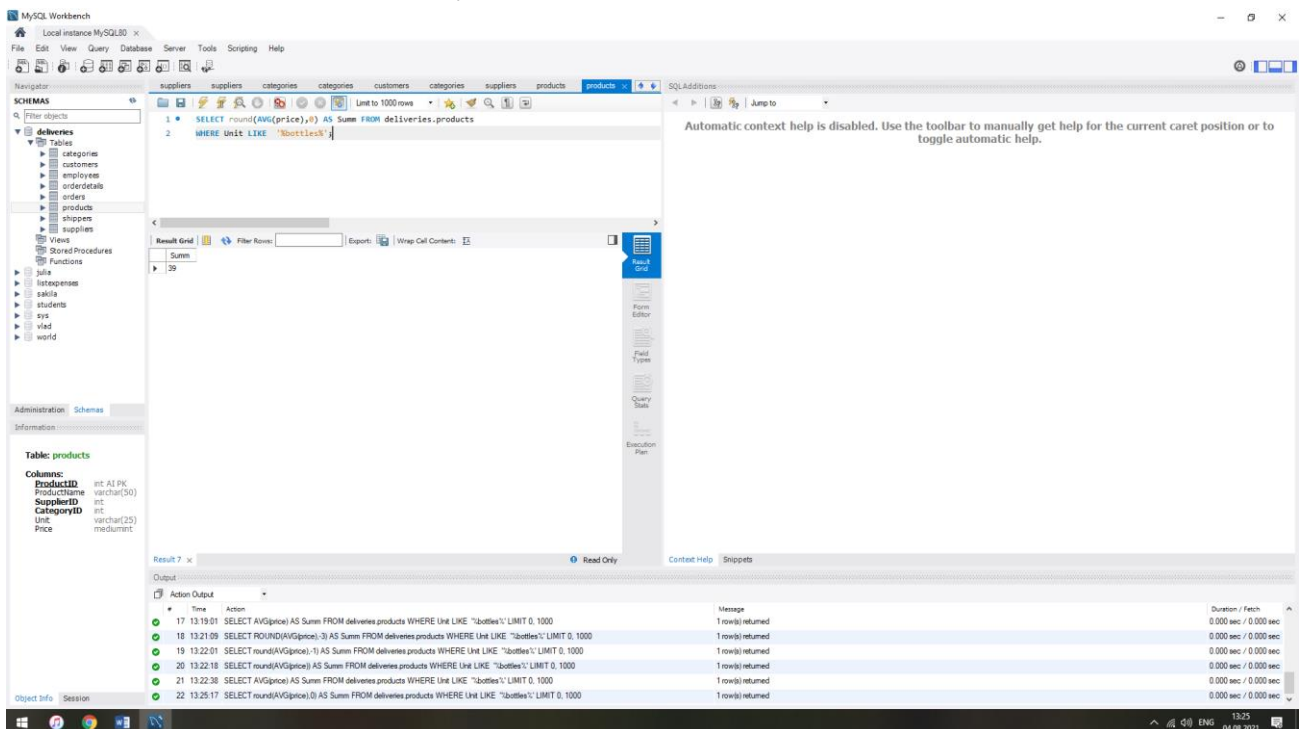
14. Вывести сумму всех товаров, в названии которых содержится "od", столбец назвать Summ.

SELECT sum(price) AS Summ FROM deliveries.products
WHERE ProductName LIKE '%od%';



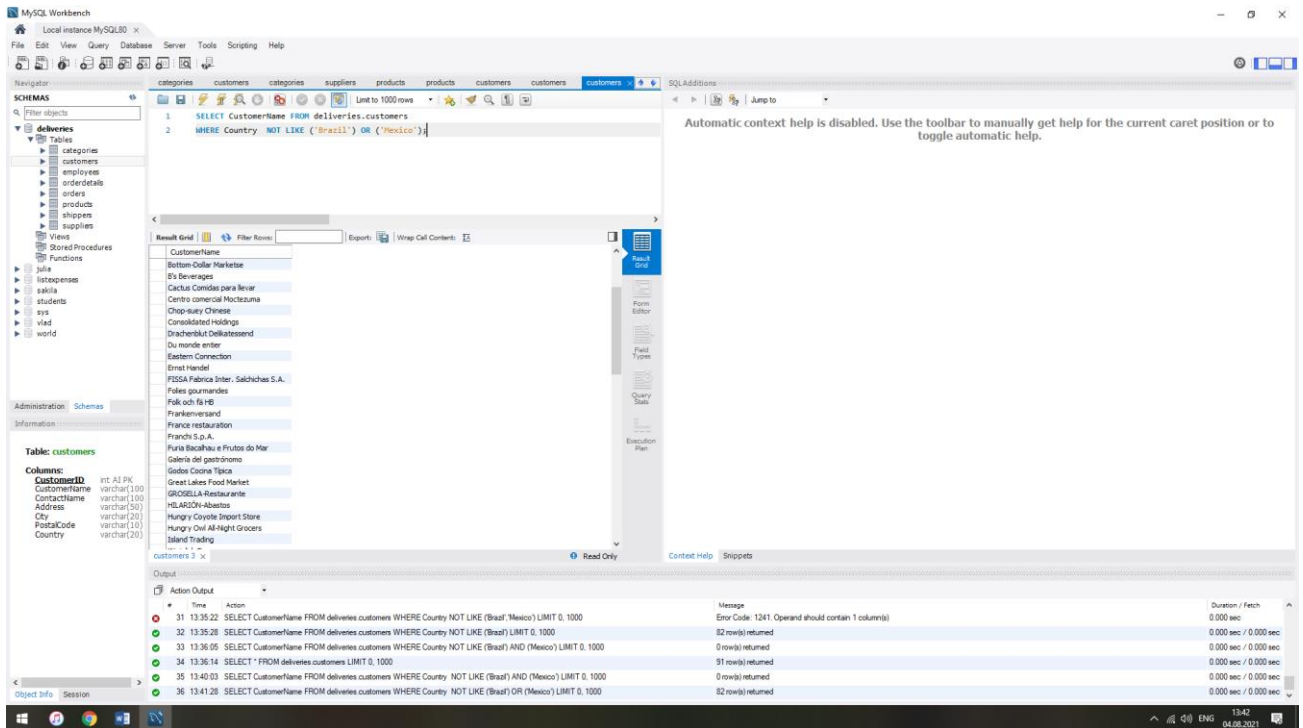
15. Вывести среднюю сумму товаров (Products), поставляемых в бутылках (у которых Unit – bottles) округлив до 2-х знаков после запятой, столбец назвать Summ.

`SELECT round(AVG(price),0) AS Summ FROM deliveries.products WHERE Unit LIKE '%bottles%';`



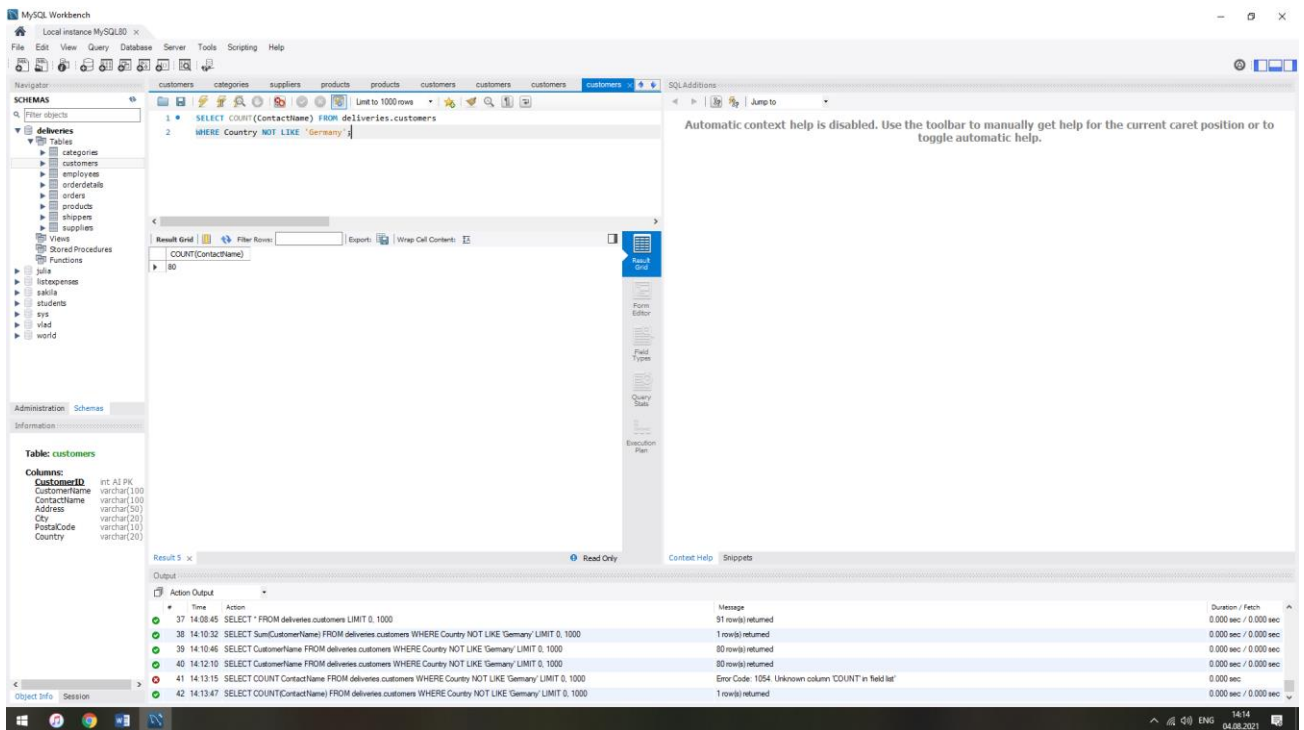
16. Вывести список клиентов Customers (только их имена), которые НЕ проживают в Бразилии и Мексике.

SELECT CustomerName FROM deliveries.customers
WHERE Country NOT LIKE ('Brazil') OR ('Mexico');



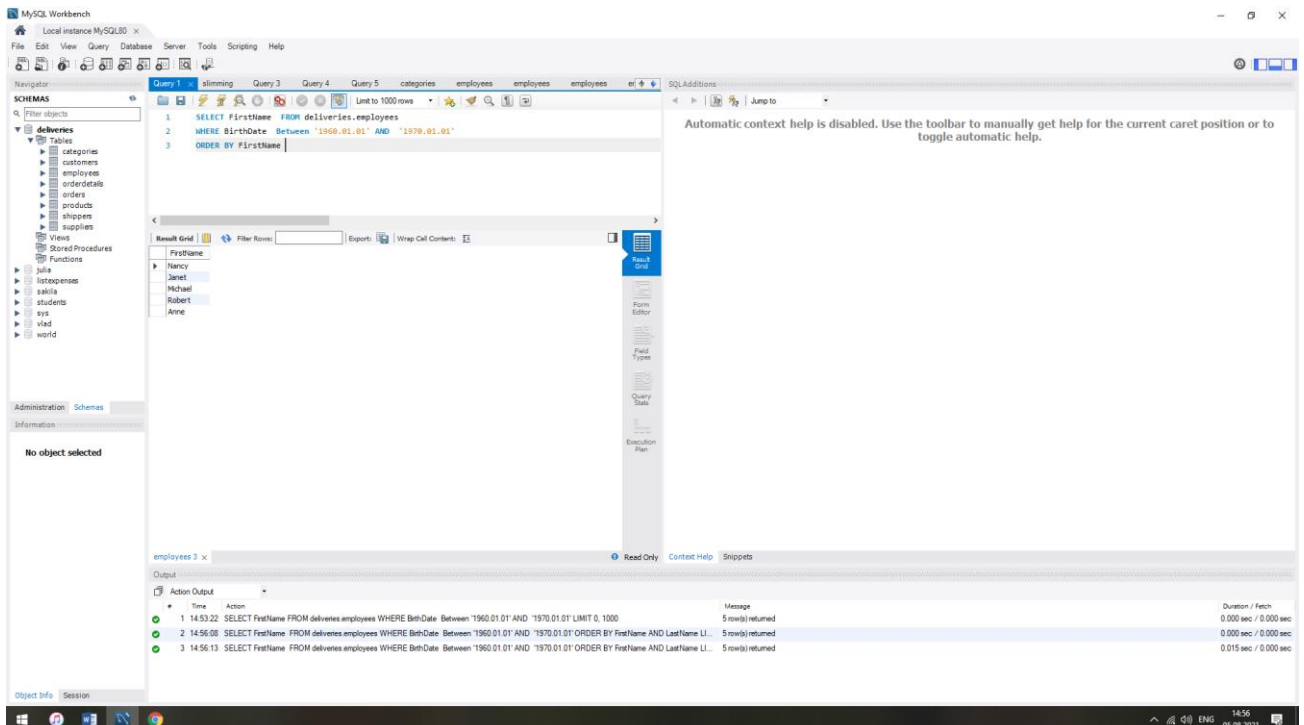
17. Найти количество клиентов, которые НЕ проживают в Франции и Германии, столбец назвать Countt.

SELECT COUNT(ContactName) FROM deliveries.customers
WHERE Country NOT LIKE 'Germany';



18. Вывести имена сотрудников (Employees), родившихся после 01.01.1960 года. Отсортировать результат по имени и фамилии.

```
SELECT FirstName FROM deliveries.employees
WHERE BirthDate Between '1960.01.01' AND '1970.01.01'
ORDER BY FirstName
```



19. Добавить 5 новых поставщиков (Suppliers) с помощью 1ого запроса (SupplierID генерируется автоматически).

После выполнения этого запроса, удалите добавленные строки.

INSERT INTO

suppliers(SupplierName,ContactName,Address,City,PostalCode,Country,Phone)

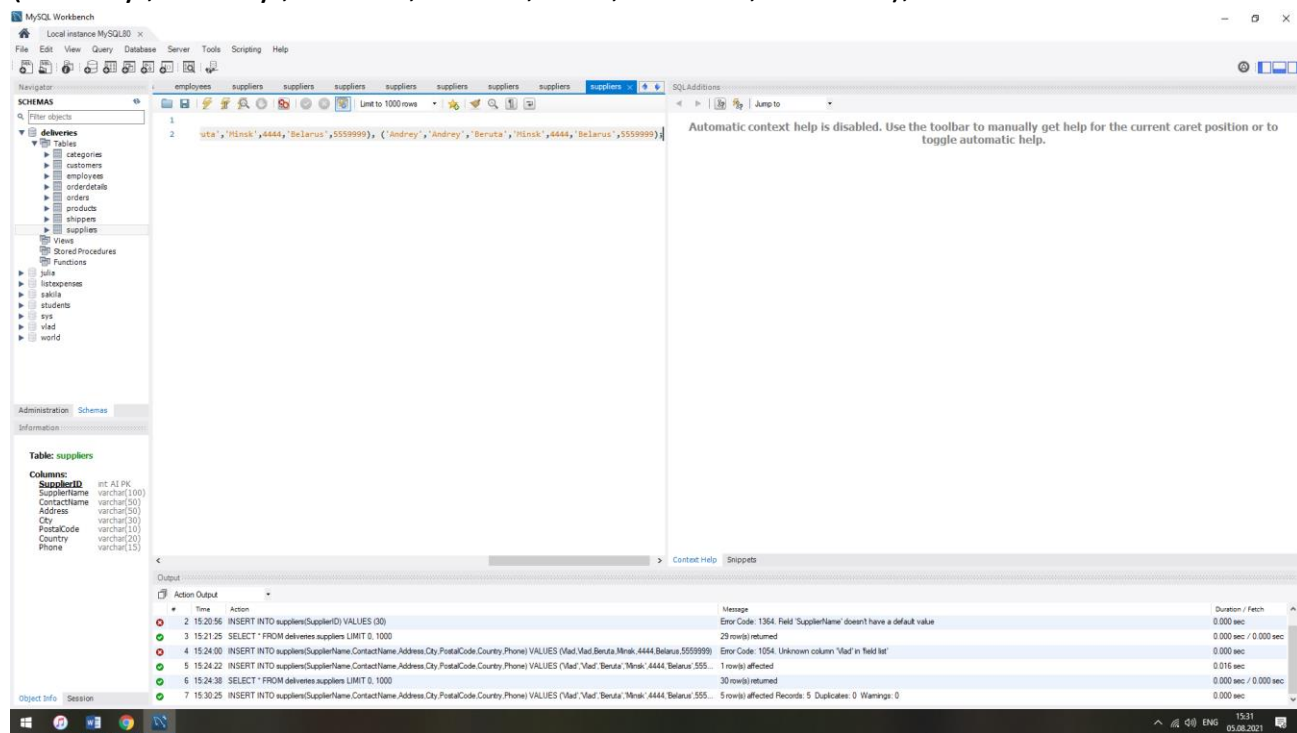
VALUES ('Vlad','Vlad','Beruta','Minsk',4444,'Belarus',5559999),

('Ivan','Ivan','Beruta','Minsk',4444,'Belarus',5559999),

('Fedor','Fedor','Beruta','Minsk',4444,'Belarus',5559999),

('Petr','Petr','Beruta','Minsk',4444,'Belarus',5559999),

('Andrey','Andrey','Beruta','Minsk',4444,'Belarus',5559999);



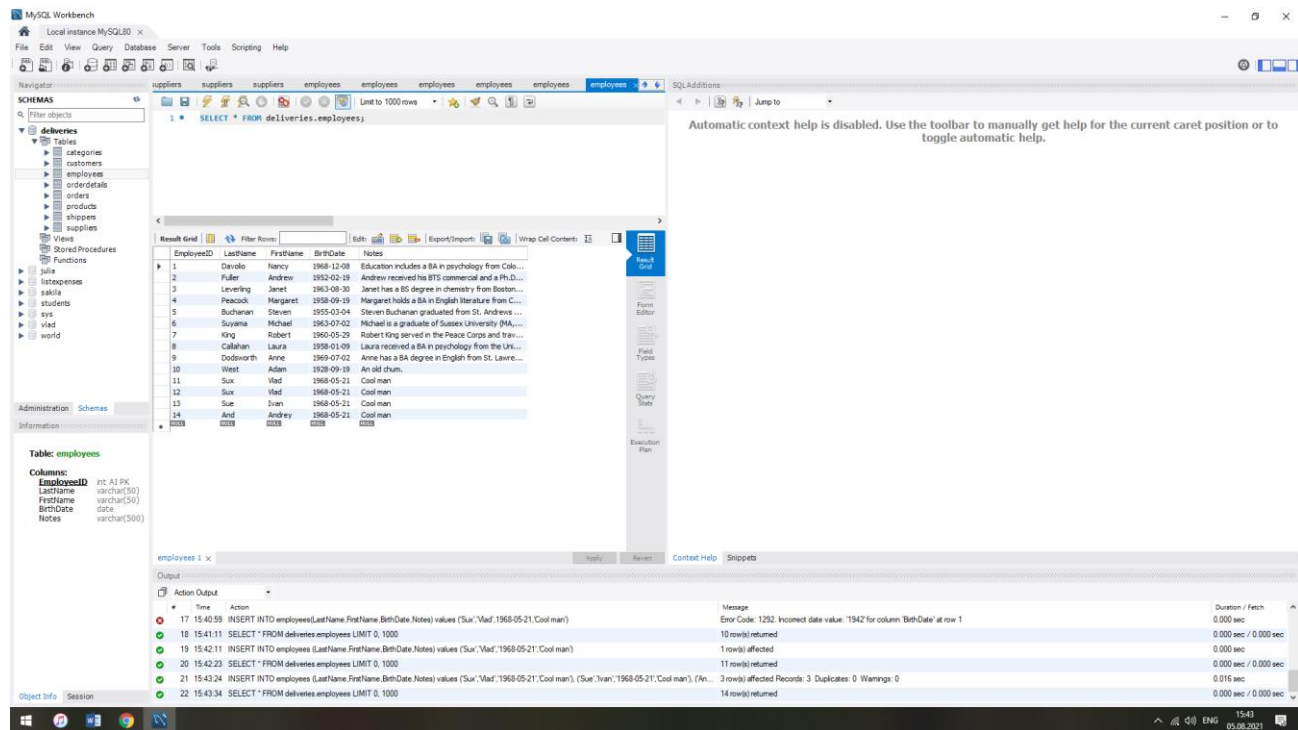
20. Добавить 3 новых сотрудника (Employees) с помощью 1ого запроса (EmployeeID задается вручную).

После выполнения этого запроса, удалите добавленные строки.

INSERT INTO employees (LastName,FirstName,BirthDate,Notes)

values ('Sux','Vlad','1968-05-21','Cool man'), ('Sue','Ivan','1968-05-21','Cool

man'), ('And','Andrey','1968-05-21','Cool man');



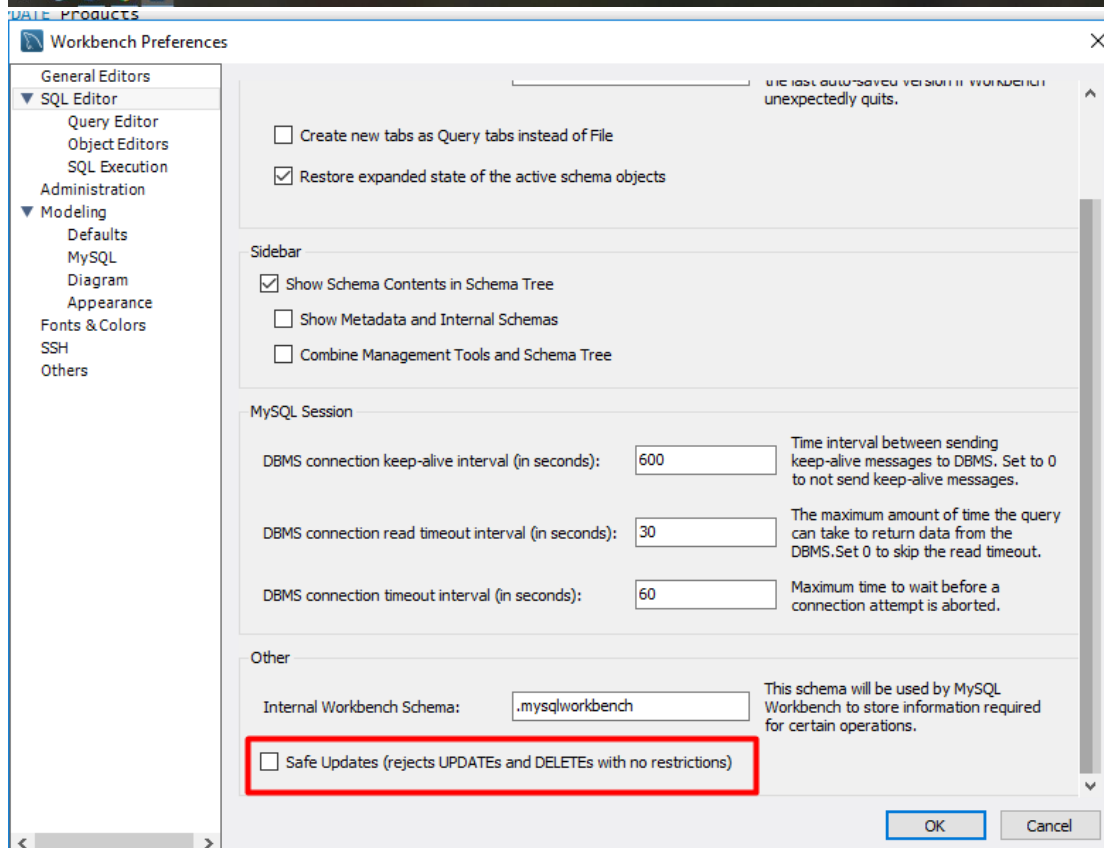
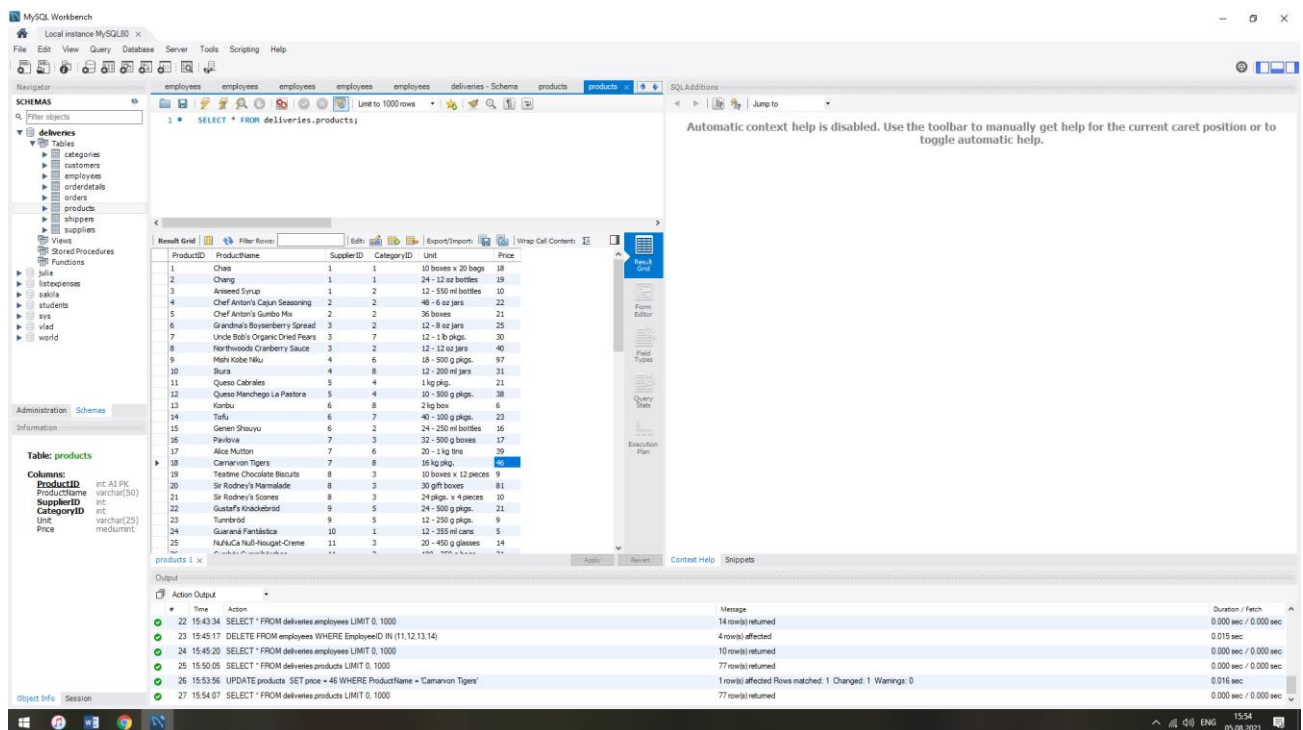
21. Изменить цену у продукта (Products) с названием “Carnarvon Tigers”.

Note: для того, чтобы разрешить update/delete без указания конкретного Id, нужно анчекнуть свойство Safe Updates: *Edit -> Preferences :*

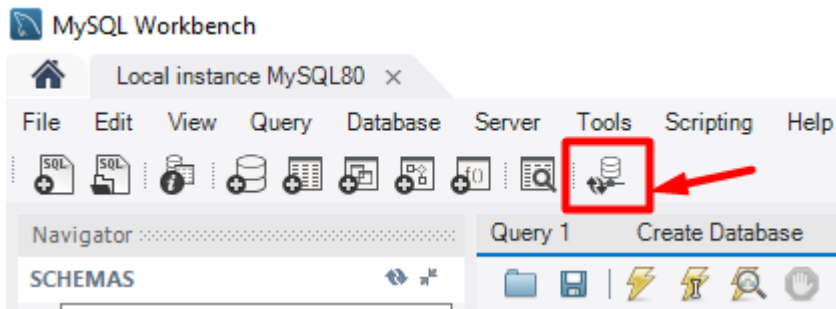
UPDATE products

SET price = 46

WHERE ProductName = 'Carnarvon Tigers';



А затем переподключиться к серверу:

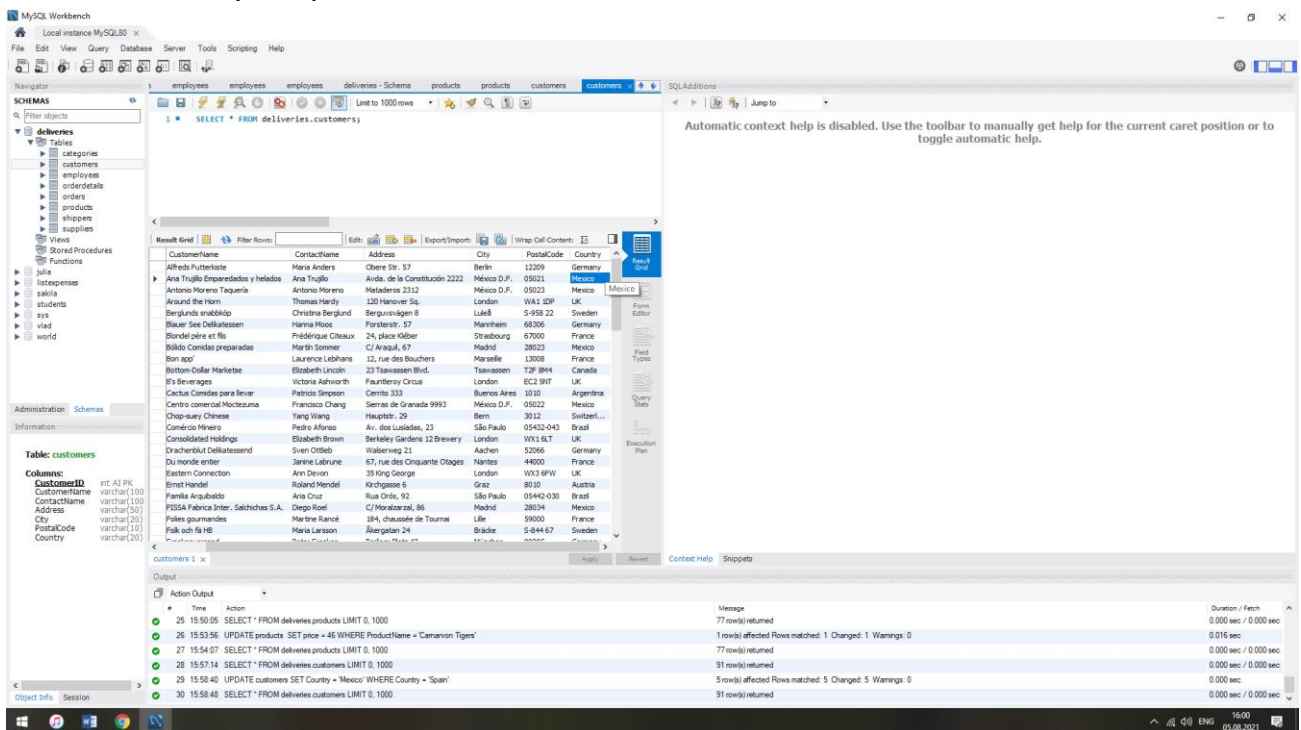


22. В таблице Customers заменить Mexico на Spain.

UPDATE customers

SET Country = 'Mexico'

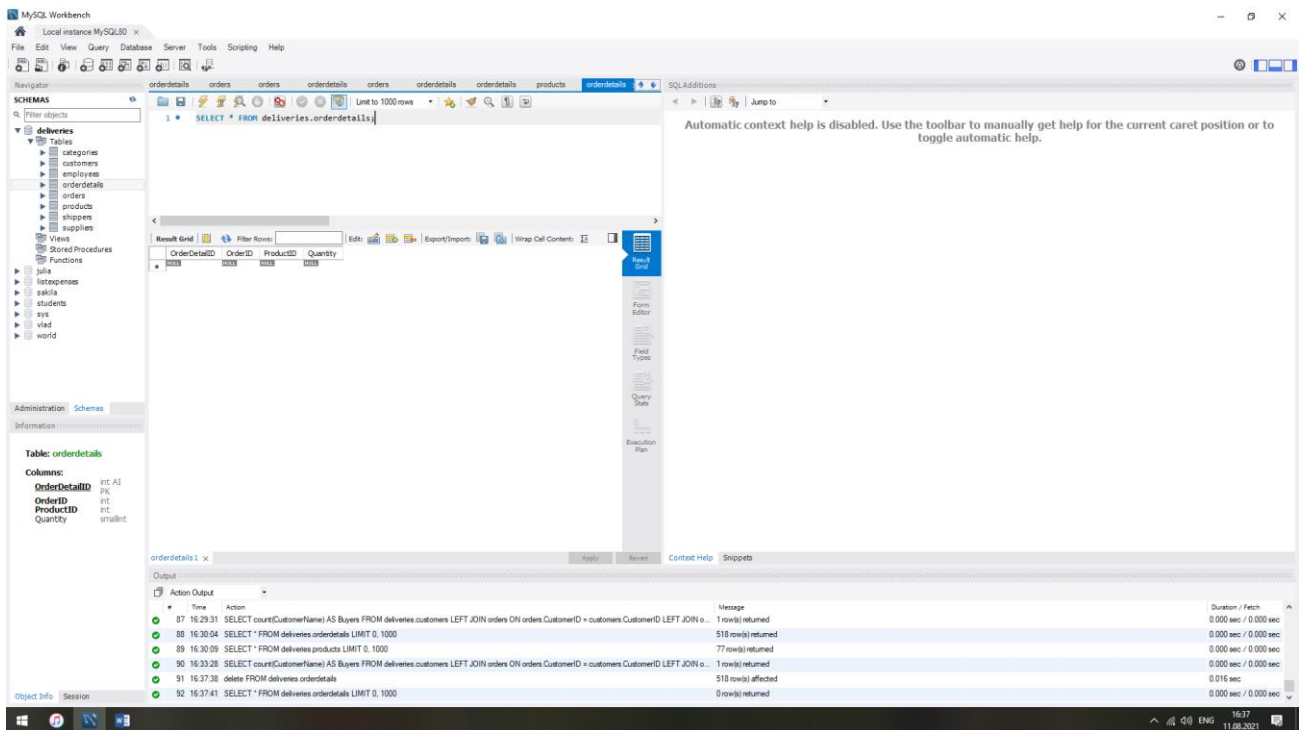
WHERE Country = 'Spain';



23. Удалить все записи из таблицы OrderDetails.

После выполнения этого запроса выполните INSERT запрос из скрипта на создание БД (INSERT INTO orderdetails).

delete * FROM deliveries.orderdetails

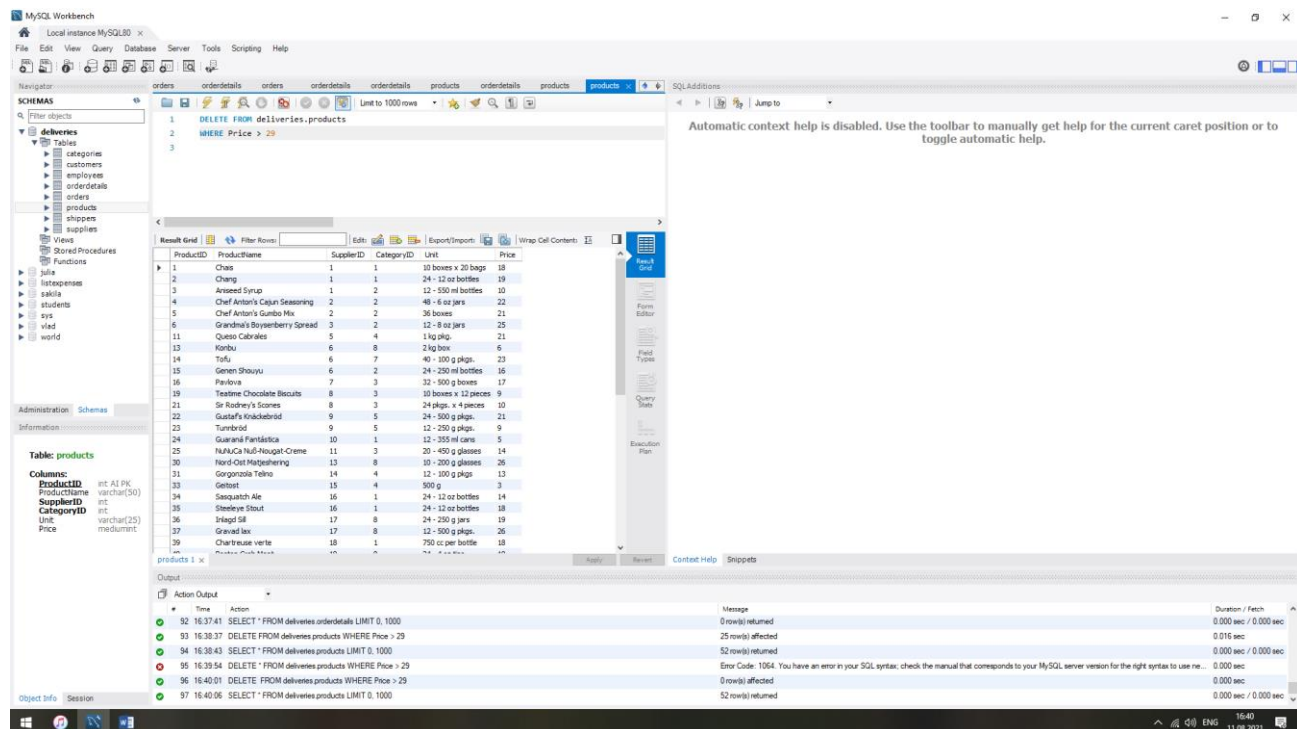


24. Удалить все продукты (Products), у которых цена выше средней.

После выполнения этого запроса выполните INSERT запрос из скрипта на создание БД (INSERT INTO products).

DELETE FROM deliveries.products

WHERE Price > 29



25. Выбрать все продукты из Products, у которых Price = 10, 13, 15 – три Select команды с объединением результатов через UNION.

```
SELECT ProductName FROM deliveries.products
```

```
WHERE Price = 10
```

```
union
```

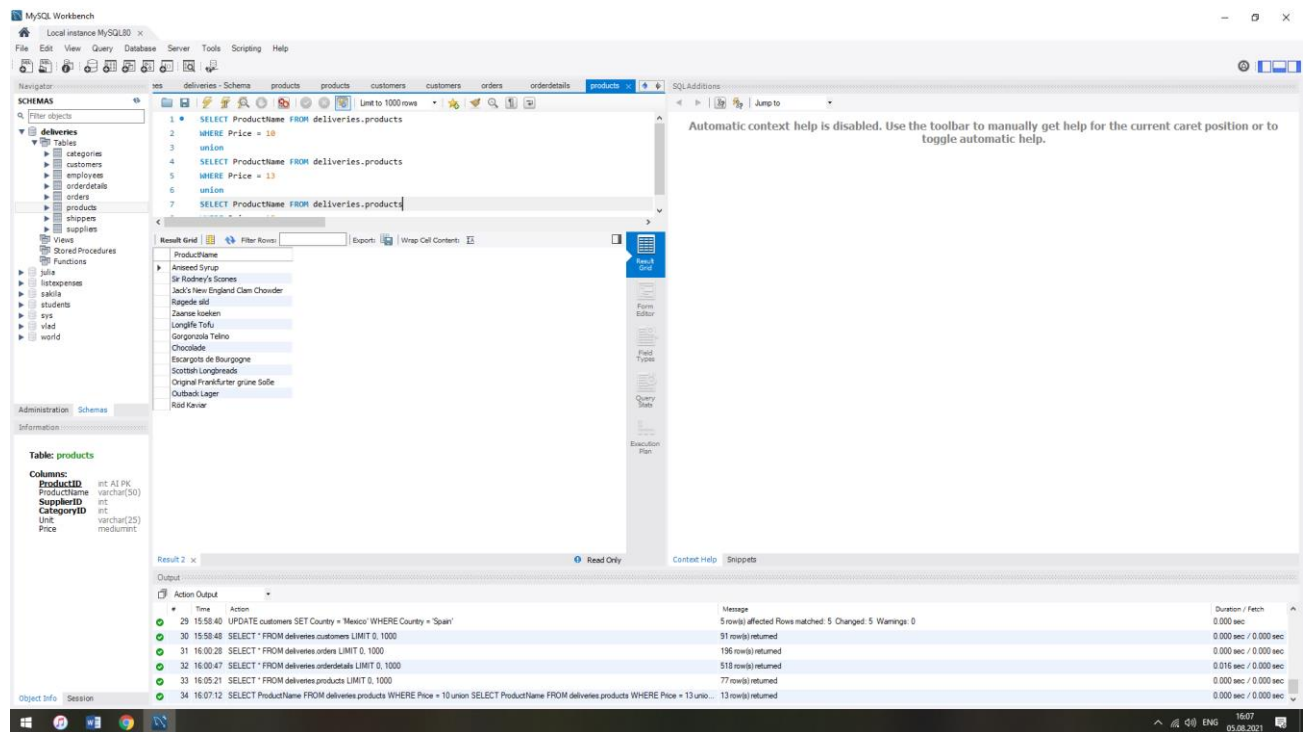
```
SELECT ProductName FROM deliveries.products
```

```
WHERE Price = 13
```

```
union
```

```
SELECT ProductName FROM deliveries.products
```

```
WHERE Price = 15
```



26. Вывести список стран и количество поставщиков (Suppliers) в них, при этом включить только те страны, где количество поставщиков больше двух.

```
SELECT Country FROM deliveries.suppliers
```

```
union
```

```
SELECT count(SupplierName) FROM deliveries.suppliers
```

27.В таблице OrderDetails найти заказ с максимальным количеством (Quantity) заказанных продуктов. Вывести OrderID и количество продуктов в этом заказе.

SELECT OrderID FROM deliveries.orderdetails

WHERE Quantity = (SELECT max(Quantity) FROM deliveries.orderdetails)

UNION

SELECT Max(Quantity) FROM deliveries.orderdetails

WHERE OrderID = 10398;

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
1 SELECT OrderID FROM deliveries.orderdetails
2 WHERE Quantity = (SELECT max(Quantity) FROM deliveries.orderdetails)
3 UNION
4 SELECT Max(Quantity) FROM deliveries.orderdetails
5 WHERE OrderID = 10398;
6
7
```

The Results tab shows the output of the query:

OrderID
10398
120

The Output tab shows the execution log:

Time	Action	Message	Duration / Fetch
33 21:12:09	SELECT OrderID FROM deliveries.orderdetails WHERE Quantity = (SELECT max(Quantity) FROM deliveries.orderdetails) LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
34 21:12:23	SELECT * FROM deliveries.orderdetails LIMIT 0, 1000	518 row(s) returned	0.000 sec / 0.000 sec
35 21:12:32	SELECT OrderID FROM deliveries.orderdetails WHERE Quantity = (SELECT max(Quantity) FROM deliveries.orderdetails) UNION SELECT Quantity FR...	3 row(s) returned	0.000 sec / 0.000 sec
36 21:13:19	SELECT Quantity FROM deliveries.orderdetails WHERE OrderID = 10398 LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
37 21:13:40	SELECT OrderID FROM deliveries.orderdetails WHERE Quantity = (SELECT max(Quantity) FROM deliveries.orderdetails) LIMIT 0, 1000	1 row(s) returned	0.016 sec / 0.000 sec
38 21:15:26	SELECT OrderID FROM deliveries.orderdetails WHERE Quantity = (SELECT max(Quantity) FROM deliveries.orderdetails) UNION SELECT MaxQuantit...	2 row(s) returned	0.000 sec / 0.000 sec